SUCCESSFUL BREEDING

THE BREEDER AND HIS HORSE

THE HORSE AS A PRODUCER

A Book that comes
near to the Heart
of every Horseman.

Price $1.75

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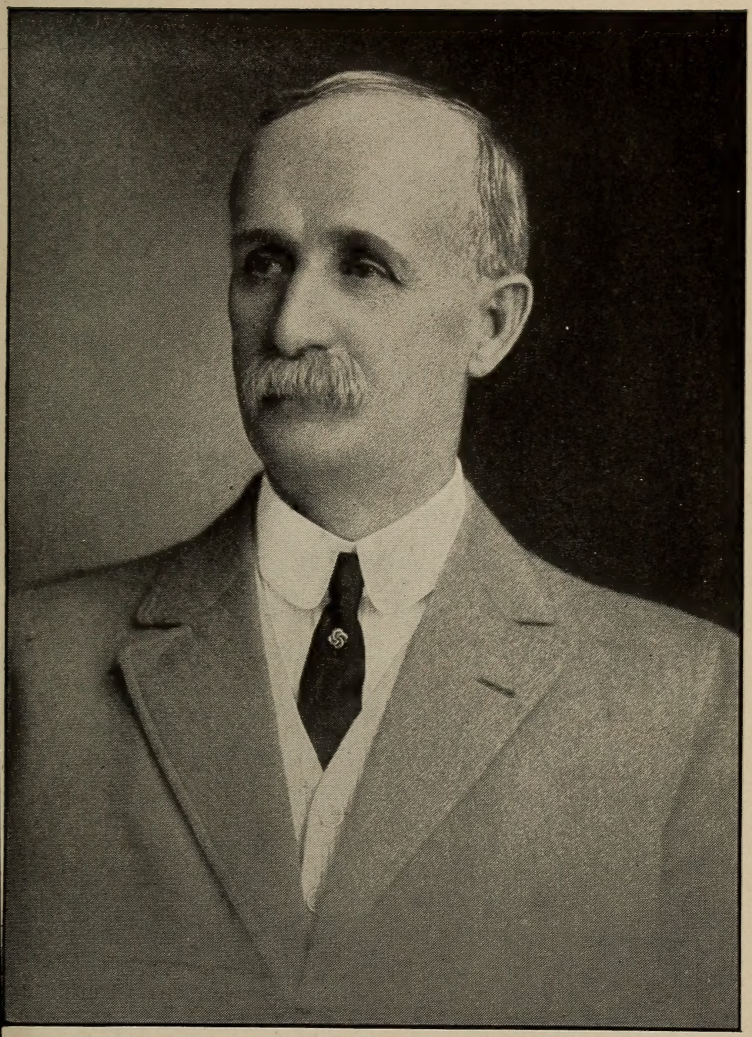


Very Truly Yours
O. Crittenden

Preface.

THE busy man of to-day has not time to read page after page in order to sift out a single point. The information herein is supplied in brief form, and in plain every-day English, that the uneducated can understand equally as well as the educated.

Practical Horse Breeding.

THE EXPERIENCE OF O. CRITTENDEN.

THE circumstances under which I have been induced to write this volume for the public, are solely through the desires of many of my patrons that have from time to time urged me to give them a complete history of my experience in handling Stallions, Breeding all classes of Mares and using Pregnators as Artificial Assistance in breeding. After carefully considering these many requests, I have decided to grant those wishes, and will put that information in book form, and my desire will be to try and make this little volume of value to Breeders, Stallion owners, and to the General Farmer. A book worthy of being read, kept and referred to as occasions may arise.

My Long Experience

I was raised on a Stock Farm of 1,200 acres in what is known as the Western Reserve in the northern part of the State of Ohio. I grew up with the business. In 1872 I launched out into the breeding business for myself. I soon found myself the owner of three or four stallions that I was keeping for public use, and with a few brood mares, and a few Registered Short Horn

Cattle. I was always on the alert for any reasonable and new ideas and to test out anything that would improve the welfare of the breeding business. It is with the breeding business, as well as in any other business. We find we have certain things to contend with. The greatest problem I found to solve was, as to how to get a certain class of mares to produce, mares that were supposed to be barren, and also a question as to know just where to place the real cause of this trouble, with the mare or the stallion. While giving this matter considerable study, and making numerous examinations of mares, I felt justified in placing the greatest cause with the mare. In 1890 I invented an Impregnator to assist nature in breeding this class of mares, which has been a perfect success. By adding the Impregnator to the breeding business has been the means of making the business more profitable.

There is a time for everything—a time to sow and a time to reap—and the Ruler of the universe has never yet failed to provide a time for both.

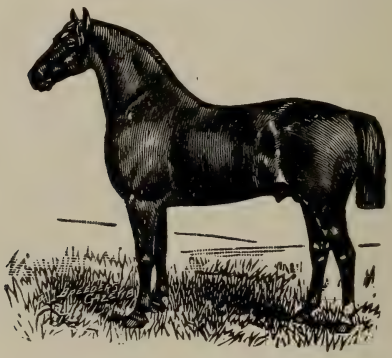
We live, not as individuals independent of our neighbors, but as a part of the community, with many rights in common. Knowledge is power, and it has been said that the best part of a breeder is his brain, and with it goes hand-in-hand experience.

No man is so fully experienced in all the affairs of life that there is nothing more for him to find out; consequently every man must in some things be guided by the experience of others.

I have handled stallions in all stages of their

lives, have bred them to hundreds of mares in the breeding seasons, and as the stallion ranks first we will look to his interest first.

The Stallion



Keeping a stallion is a business proposition. At least it should be, though for some men it is a poor business. If it is a business proposition, it should be handled as such, that is, effort and care should be taken to make it as certain and sure as it is possible to do. The greatest returns, and the time when a stallion is the busiest is, of course, during the breeding season.

Before using the stallion let him get some age. No colt will breed as well as an old horse, from eight to twenty years old, provided the horse has been properly taken care of. Next avoid all pampering both as to care and feed. Feed and work him as you would any horse, not over-heating or over-exerting him. If not situated so you can work or drive him, have a good, roomy yard where he can run and exercise at his own free will. There are three things that should be remembered

that are not conducive to fertility in the stallion or soundness, strength or longevity in his progeny: viz., idleness, pampering with unhealthful food, and putting him to service when too young. If these matters are observed and you will limit your horse to the proper number of mares, you will get good results.

Man was created ruler over the lower animals. He must show and exert that power or else the stallion, most mighty of domestic animals, will assume the rôle of ruler. In most cases the man in charge is capable enough but does not know how or what to do. One should always remember that in handling a vicious stallion that their masculine character is liable to assert itself at almost any moment. Firmness should be displayed by the man in charge. In handling vicious stallions you should give them to understand that you are master of the situation, and to be on the safe side, you should be prepared with means to accomplish that point whenever he undertakes to test your ability. We have never been able to find a Controller that brings them to their senses like the O. C. Stallion Controller does. With a stallion you should never show any signs of fear, always be sure that you are in the right and then accomplish your point. They should be treated kindly but firmly, never take any chances with him, and always remember that you are dealing with a stallion.

A stallion should never be petted and should always be made to depend on his caretaker. An attempt should not be made to make him do anything that there is a doubt of his being able to do.

Should he refuse to do customary things, be firm, but kind; under no circumstances let him get the best of you, for if he does he will never forget it; neither will you, if you live. Always keep an eye on him as he is probably always watching you, and speak to him when you approach him.

Let him know that you are his friend. Take the stallion out around other horses and teach him how to behave. Do not allow him to be continually cutting circles. It is liable to strain him and may cause a permanent injury to him, nor is it a good way for him to show what he is. All of these are unnecessary, and it is extremely annoying and a positive nuisance. How is the trouble to be remedied? Simply by putting a "man" in charge of the horse.

When a breeder comes to examine your stallion in view of breeding to him, lead him out where he can look him over, and should he wish to see his action, take hold of the lead strap a foot or so from the bridle bit, let him step along sharply for a few rods away, and then back past him, bring him back and let him stand still before his inspector.

His First Lessons in Serving Mares

At the time of service is another time where real horsemanship is necessary. To know how to handle the stallion and to be able to diagnose the exact condition of the mare.

In giving him his first lessons in serving mares, it is necessary to impress upon him that patience and obedience is required of him before he is allowed to serve the mare. Also, he must be taught

to go to the mare slowly and go to her side before mounting. In this way, a mare that is ready to be served will rarely kick the horse, as she would if he were allowed to run from a distance on his hind legs and mount.

When the service is over, as he goes to dismount draw the mare's head gently but firmly towards you and there is little chance for her to kick him. Don't use a whip while trying or breeding mares. If possible have a teasing pole beside a coral and away from suckling colts. It may prevent an accident and will not worry the groom or horse. Bad behavior by the stallion is caused by the care and treatment he receives.

Care should be taken that the horse does not "waste" between services, as it will decrease his foal-getting properties and will weaken him. Sexual stimulants are not necessary, if proper care and moderate service is allowed him.

Some times in serving a mare the stallion will come off proud. That is to say he does not discharge. Lead him around for a few minutes, then try him back again. In serving a mare, a horse should be allowed to remain as long as he desires to do so, as the mare rarely discharges before the stallion.

Good feed and treatment, with the proper management, will make the stallion a profitable investment.

Caution

Some owners of mares have a dread for the hopples, but I deem it advisable to put them on all mares, as some of them will sometimes kick the

horse when he is leaving her, and when least suspected.

I always place a set of breeding hopples on the mare. Never omit it. Even the best tempered mare in the world may become excited and kick and injure your horse. Several good stallions have had to be killed within the last few years, because the mare kicked and broke their legs.

A slight kick will sometimes retire a horse from service, and if kicked in the genitals or other vital parts it might cause his death.

Don't forget that there are plenty of mares and few good stallions, and it is better to be safe than sorry.

Never use a stallion on more than two mares a day and not at all on Sundays. Give him a rest; he needs it and this Sunday rest will quiet him to a large extent, which will be one of the best results that can be suggested.

Do not get excited when they say they will go to other horses with their mares after you have turned them away for the day, because nine times out of ten they will be back the next time. This will make your season longer. Do not breed a mare that has been bred several times to another horse and failed to get in foal unless you have an O. C. Safety Pregnator or an O. C. Improved Reliable Pregnator to use on them; then you can feel safe in breeding any that come.

Working the Stallion

Everyone surely appreciates the fact that health

and vigor, at its best, cannot be had in the animal kingdom without exercise.

There is no reason under the sun why the stallion should not be put to work every work-day of his life. There is every reason why he should. We expect his offspring to be able to pull the largest loads and at a lively gait. Why should we expect them to do more than he is able to do himself?

The stallion should not be required to do arduous labor during the season, as it uses up too much of his vitality. Light work or a road exercise is better. If fleshy stallions are put to work, they should be handled very carefully in the springtime and hot weather to prevent over-exhaustion, which frequently causes death.

There are men who imagine if they pay $2,500 for a stallion he is too high priced to work. The stallion that cannot do a good hard day's work, and do it every day in the year, will not be able to sire foals that can do heavy work. If we do not work our stallions so as to develop their muscles we will soon be producing a race of horses without sufficient muscle for heavy work.

Results are what we want and to secure strong, vigorous, healthy colts the parents should be as near in normal condition as it is possible to have them.

In conclusion, then, it is well for us to remember that if it is foals we want, and especially if it is foals of the most pronounced vitality, those which will mature into horses capable of performing our heavy work and with such powers of re-

sistance that disease will not attack them, we must have stallions and mares that are physically and sexually vigorous and normal. Even if we have such mares and stallions it is only by good care and the best of handling that will enable us to keep them in the best breeding condition.

We have men in this locality who have some of the best mares in the country and who are good feeders and all around horsemen, who refuse to breed to local stallions because through lack of exercise the stallions are not sure. Exercise is necessary to keep up the health, tone and potency of the horse. Stallions deprived of it usually become practically impotent after a very few years.

It is well known that there are large numbers of horse owners—especially among farmers who breed on a small scale, and without very definite ideas on the subject—who judge of condition by full, rounded outline of the animal, and that to many of them "condition" without fatness is inconceivable. The owner of the second-rate, often unsound, stallions that travels the countryside recognizes this feeling, and hides the faults that would otherwise be apparent under a coating of flesh.

Many a stallion, because of his disposition, or because some foolish keeper has handled him improperly, is unfit to be worked with other horses, or where he can see them, and such an animal must necessarily be handled in a different manner during his idle season. He should be confined in a stall only at night and during cold or stormy weather, and for this reason should have a good-sized lot fenced in chicken-tight, bull-strong, and

of sufficient height to insure his not getting over it. He then may be turned into this lot most of the time, which will make it possible for him to take daily, moderate exercise in the open air and sunlight. His stable should be in one corner of this lot, which will lessen the necessity of changing him about and handling him so much.

When a stallion fills a place in the team on the farm, his whole body is in a healthy and normal condition, his flesh is firm and solid and full of vitality. The semen from a stallion in that condition will have more fertilizing power in fertilizing the egg of the mare, than the semen from a stallion that is allowed to lead a life of idleness. If we will take the germ in the semen of both these stallions and put them under a microscope we will find that the germs from the stallion that has regular exercise will live longer than those from the soft and flabby stallion that gets no exercise.

Muscle Rather Than Fat.

A stallion in moderate flesh and in good thriving condition will be more sure as a foal getter and will get stronger and better colts than the one that is overly fat.

Overfeeding is bad. Muscle, rather than fat, is wanted in reproduction.

The entire worth of the horse as a domestic animal depends solely upon his muscular power and his ability to use it.

It is so in no other animal on the farm. Neither the beef nor dairy cattle nor the quiet and contented hog are required to develop muscular power, except so far as is necessary for general health.

No stallion can go into the breeding season and settle a satisfactory per cent. of his mares unless he is in good condition, and good condition is secured more rapidly and better if he is worked and fed judiciously than if he is stabled and fed high.

Appreciating as we do the necessity for exercise in the breeding horse, is it not passing strange that the average stallion to-day leads a life of indolence?

Knowing this to be true, is it to be wondered at that the average stallion gets less than fifty per cent. of the mares he breeds, in foal, and that a good percentage of those he does get are dumbheads and dead on their feet?

The point is just this: muscular energy, perfect health and vigor may only be assured in the animal kingdom, when muscular movement in all parts of the body is of regular and frequent occurrence. In the breeding of animals, where the qualities of the sire are almost always desired in the offspring it becomes of prime importance that such sire be in perfect physical condition. Such condition is absolutely impossible to obtain without abundant exercise and in no class of domestic animals is such a condition so certainly needed and so seldom found as in the horse. If muscular vigor, activity and potential energy is ever called for, it is surely in the horse. Of course, over-taxation or strain should not be put upon a horse in advancing age; but judicious and sensible employment requiring the use of all his faculties or powers is

healthful and not harmful; they are far better for him than retirement into luxury and idleness.

Cruelty to the Stallion

There are other enjoyments that come to the stallion that earns his daily rations. Such as the companionship of man, the hearing of human voices, being out in the sunshine and fresh air, instead of being shut up in a dark, dirty, lonesome and poorly ventilated box stall shut off from the right of everything, there to pass his time in idleness, to listen to every sound, there to remain in almost solid confinement. Is it to be wondered at, that he creates the habit of masturbation? When you place a horse under such treatment, you are abusing man's noblest friend. I kindly ask you, to just stop for one moment and imagine yourself placed in just such a condition. If such had been your misfortune, how long do you suppose it would be before you would be a fit subject for the asylum? Think of this, and do unto him as you would wish to be done by. If you are not situated so you can work him, have a large box stall with an open door leading into a large yard where he can go out and in at his will, that he may see and know what is on the outside. I know of farmers that own stallions that treat them out of the breeding season, as some farmers do their machinery out of season. They leave it stay just where they happen to unhitch from it after the work is done, and there it stands until they want it the next season. That is the kind of treatment some stallions get out of season, put in a box stall and there they are until the next season.

Outside of the big horse establishments and other places where there are men engaged to handle stallions the year round, it is doubtful if there is any one point so neglected on the farm as the proper care of the stallion out of season, and it is safe to say that this neglect yields a far greater influence on the quality of his offspring than most farmers realize.

It is a general principle in horse breeding that the progeny is strongly influenced by the characteristics of their ancestry. The horse which is to prove of value to its owner by taking its full share of work on the farm and possessing the quality that will enable it to sell well must, to a large extent, have this tendency transmitted to it through a sire and a dam which have shown their usefulness in a like capacity. A stallion that has been unduly pampered by high feeding and a lack of exercise is sure to be deficient in constitution and muscular development.

In order that a stallion may impress his progeny with the best possible physical traits, it is essential that his muscular, digestive and respiratory system be kept in a proper condition during the period that he is not required for stud purposes.

A stallion is usually at his best when from eight to twenty years old, providing he has been properly cared for, both in season and out of season.

Using the Stallion to Excess

Many stallion owners would be surprised if they were told that one or two services a day would result in more live foals, than if more services were made with the same stallion, but this is the

truth. When a stallion is bred to three or four mares a day, it would be almost impossible to get all of those mares in foal from the services rendered that day, for the very reason that it would be out of the question for the stallion to secrete semen containing full developed germs or spermatozoa in all those services. No intelligent reason can be given for using a stallion when he is in a condition, making the inpregnation of the mare impossible. Yet this is being done thousands of times every day during the breeding season in all parts of the country. This practice not only results in a few foals, but it is a positive injury to the stallion, and that is one of the discouraging features in the foal production. One half of all the stallions in this country which has become sterile can trace their sterility back to excessive service. When a man allows his stallion to serve three or four mares a day, that practice will make his stallion just as unfit for service, and will drain his vitality to about the same degree as does the stallion that practices the habit of masturbation. The man that allows such should just stop and consider that it is the number of live foals, rather than the number of services that make the profits. Again, we must exercise a little reason with good judgment, care and good handling if we are to expect our stallions to remain in a virile condition and being capable of siring foals endowed with vitality of a high degree.

Hambletonian 10 in The Stud

It is believed that Hambletonian made a heavier season in the stud during his lifetime than any

other prominent trotting sire. The following record of his stud career is interesting:

History gives it that Rysdyk's Hamiltonian, at the age of 15 years, was bred to 217 mares in one year, and 67 per cent. of them got in foal.

In the *Horse Review* of Sept. 13, 1911, there is an account given of a son of Rysdyk's Hamiltonian, Aladdin 2235, which, at the age of twenty-nine years, covered twenty-one mares and got eighteen foals. If we would work our stallions, give them proper care and exercise, not get greedy and breed them to three or four mares a day, our stallions of to-day would live longer, and get a larger per cent. of foals and colts of stronger constitution.

I would consider that 100 mares would be a sufficient number in one year for any stallion if he was to be kept in the stud for any reasonable length of time.

Over-service in the stud very often causes sterility in the stallion, and is injurious to his future usefulness.

Service for Stallions

The amount of service for the stallion is a much discussed point, the opinions of the owners differing about the number of mares that a horse should be allowed to serve.

There are no statistics which show actual results. It is generally held that a 2-year-old stallion should be allowed to serve only a few mares—say 10 or 12; a 3-year-old stallion may serve 15 to 30; a 4-year-old stallion 25 to 50.

The following figures are taken in regard to Rysdyk's Hamiltonian, who held an enviable record

in service. He was kept in service from 1851 to 1875, with the exception of 1868, during which year he was given a rest, or at least no figures are quoted for that year. During the 23 years of service the average number of mares bred was 83 per year, and the average percentage of foals to mares served is 67, varying from 58, the lowest at 18 years of age, to 81, the highest, at 12 years of age, following the year of rest.

Year.	Mares Served.	Per Cent of Foals.	Foals Dropped.	Service Fee.	Total Fees.
1851.....	4	75	3	Free	$ 325
1852.....	17	76	13	$ 25	325
1853.....	101	78	78	25	1,950
1854.....	88	70	62	35	2,170
1855.....	89	72	64	35	2,240
1856.....	87	73	64	35	2,240
1857.....	87	72	63	35	2,205
1858.....	72	75	54	35	1,880
1859.....	95	70	66	35	2,310
1860.....	106	68	72	35	2,520
1861.....	98	69	68	35	2,380
1862.....	158	70	111	35	3,885
1863.....	150	61	92	75	6,900
1864.....	217	69	148	100	14,800
1865.....	193	67	128	300	38,400
1866.....	105	71	75	500	37,500
1867.....	72	58	42	500	21,000
1868.....	———	No season on account of sickness			———
1869.....	22	81	18	500	9,000
1870.....	22	72	16	500	8,000
1871.....	30	80	26	500	13,000
1872.....	30	80	24	500	12,000
1873.....	31	65	20	500	10,000
1874.....	32	75	24	500	12,000
1875.....	24	8	2	500	1,000
Totals....	1,930	69	1,333		$207,705

Hambletonian 10, as a Colt

May 5, 1849, was the date of Hambletonian's birth. He was foaled the property of his breeder, Jonas Seely, Sugar Loaf, Orange County, New York. He was sold as a suckling, with his dam

the Charles Kent Mare, to William M. Rysdyk (pronounced Rise-dick) of Chester, in the same county, and he owned the horse till his death on March 27, 1876, of epizotic catarrh. Died at the age of 27 years. Rysdyk had been working for Mr. Seeley as a farm hand and paid $125 for the mare and colt. He realized thousands of dollars on his investment.

An Uncontrollable Stallion

O. C. Controller.

One of the most disagreeable things in the breeding business is to have an uncontrollable stallion. Any man can handle and control any stallion if he knows how, and if he does not know how he had better let somebody else do that until he does know how. Many stallions are practically ruined by careless handling. Often one season with an incompetent or inexperienced man will spoil a stallion for all time. On leading a stallion out to breed a mare, he should be under such control that he

should walk up to a reasonable distance of the mare and stop and wait for a signal to make a mount.

A strong vigorous and masculine stallion is certain to be amorous, yet there is not one stallion in a hundred that cannot be perfectly controlled by using the O. C. Stallion Controller. With it you can give them to understand that they must obey.

Collecting Service Fees

In some sections of the country, and especially in the remote farming districts, the custom of stallion owners is to stand their horses on the basis of stand and suck and do not expect their fees until the guarantee has been carried out. The result of this naturally is that a large number of mares are sent out to various stallions, their owners well knowing that they are not capable of producing, yet they are willing to take the chance because the chance is all on the part of the stallion owner, and in reality they do not take any chance at all.

There are a lot of mare owners who will breed their mares first to one sire and within a few days breed to another one and continue to change throughout the entire season, leaving the stallion owners to fight among themselves as to who should have the service fee in case a foal is produced. Any intelligent mare owner should be able to decide for himself what sire he will patronize for an entire season and not change until the season is over at least.

If the mare owners had to pay a portion of the fee at the time of service they would not send such mares to be bred, for as a rule the owners are

well acquainted with their condition and would not take the chance of losing the first payment.

It should be the duty of every horse breeder who is interested in better stock, better methods of collecting service fees, to get familiar with his State Representative and Senator.

Talk to other stallion owners in your vicinity so that when the time comes you will be ready to do your part.

It would be an excellent thing if a lien law would keep mare owners from trading their mares off without paying the service fees. Purchasers of mares would be more particular to ascertain as to whether the mares had been bred or not.

CONDITIONING THE STALLION

THERE is great diversity of opinion as to how a stallion should be conditioned that his inheriting qualities may be strong in transmitting to his offspring.

It is the general experience among horse-breeders that failure to hold to service on the part of a mare occurs in an unusually large proportion of cases during the early days of the stud season. In some measure this is accounted for by the fact that mares very often do not come into use particularly strong early on in the season, while the weather still keeps cold, so that, although they may show every sign of heat, and accept the stallion readily enough, they are none the less not in such a favorable condition for being successfully impregnated as in the case later on in the spring, when the season is well advanced and has become thoroughly genial and warm. That is the most natural time for breeding purposes, and the chances of conception are then undoubtedly at their best. But, besides this reason, there is also another factor, of probably equal importance, to which the frequent non-success of a service when mares are put to the horse early in the spring is in many instances due; and this is, that stallions are very commonly too fat and not in a sufficiently fit condition for breeding at the commencement of the stud season, in consequence of which they prove themselves unsatisfactory stock-getters and give disappointing results. As the season wears on, their

reproductive capacity is found to improve, because after a time they lose the superfluous fat from the combined effects of serving mares and being traveled on the road.

A stallion may be strong in blood line inheriting qualities. In order that such qualities may have a strong inheriting power and predominate in the offspring his physical condition must be in a perfect state of health, and again when in this condition, he can be relied upon as being a sure foal getter.

This point in question "Quality" in the horse is that of refinement and denseness of texture throughout.

He may have trotting or pacing qualities, or draft qualities, Intelligence, Action, Style, Form, etc., all go to make up the conformation of the horse.

Both the stallion and the mare may be rich in *different* blood inheriting qualities, and such one that may be most pure in health and blood will be the stronger in transmitting such qualities and will invariably predominate in the offspring.

You may feed your stallion or mare and get them fat and they will look fine, and they may not *then* be in a fit condition to transmit to their offspring the desired qualities that owners of the mares are desirous of obtaining.

If you expect your stallion to transmit to his offspring any blood-inheriting qualities that he may possess and build up a reputation for himself, you should begin early in the spring and put his blood in proper condition, which will enable him to transmit his blood-inheriting qualities to his offspring. Then their colts would have more quality, and the

colt crop of this country would be worth more to their owners and to this country in general.

To Know How

The secret as to how to condition a stallion that he may be in a perfect state of health and be able to transmit quality to his offspring was solved after several years' experience in conditioning stallions for the breeding season. It was found on experimenting that the condition of the blood had more influence in transmitting quality than the blood inheritance has. Of course, in order to get great quality in the offspring, you must first have the blood-inheriting qualities in either the stallion or mare. You must then condition that blood of the one that possesses the desired qualities that they may have the controlling influence in the offspring, as the condition of the blood regulates the transmitting power. This can be done by using the O. C. Stallion Conditioner.

The Conditioner purifies the system, puts it in a condition for the work of stamping into the veins of the offspring those of the most pure qualities.

Transmitting Quality.

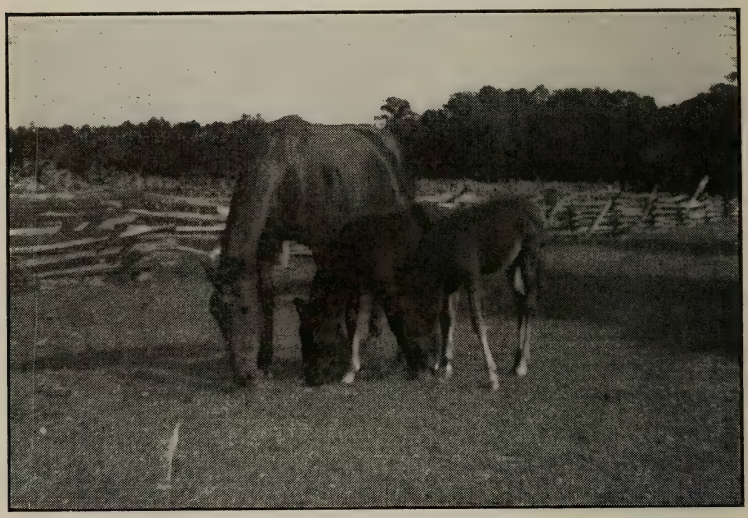
Here we show a pair of twin colts that look almost exactly alike and perfect pictures of the mother.

This is a case where the *mare* was the stronger in transmitting to the offspring.

In breeding, we must keep in mind the principle of heredity that "Like produces Like" when the system is in a perfect state of health. This applies to the brood mare as well as to the stallion.

If "like produces like," and I think we all believe

it does, why are so many people willing to buy a cheap and almost worthless stallion to be a menace to the country, or why will some people even risk breeding a good mare to an inferior horse, both in individuality and breeding; or why will people buy even cheap skates of mares because they are



cheap, hoping to raise first-class colts? Of course the better the horse they are bred to the greater will be the chances for a good colt.

Should Possess Quality

It is essential that the sire and dam should themselves possess really great qualities, should have something of their own to transmit to their offspring and not be entirely dependent on the merits of some remote antecedent. Breeders of the light harness horse are gradually recognizing the impor-

tance of this principle of heredity and as a consequence the great young trotters who are stake winners are patronized as soon as they are retired to the stud to the exclusion of older horses, even though the latter have established reputations.

The efficient performance of his stud duties—that is to say, the impregnation and not merely the serving of his mares—admittedly depends very greatly upon the stallion being in a proper condition for his work, and it is thus a great mistake to have him over fat when the season begins. Yet occasionally the main idea in preparing stallions for their rounds appears to be to get them to put on as much fat as possible by high feeding, every other consideration being lost sight of.

During the preparation which they are now undergoing in view of the approaching stud season, it is certainly necessary to feed them very well, but the diet ought to be essentially of a nourishing and strength-giving character, not fattening.

After your stallion has been put in proper condition with the O. C. Stallion Conditioner and the breeding season is at hand, then keep him in this condition by feeding him regularly with suitable grain and give him proper exercise. Do not over work him in the stud. Feed oats, bran, boiled barley and flaxseed and plenty of salt. These are all good for him.

Feeding

To the man who owns horses, "keeping a horse" means more than feeding and watering and driving it—it means looking after the vitality and health

and strength of his horse—it means keeping a sound horse sound.

Knowing how to do this without spending a lot of money for expert advice is another thing.

Feeding a stallion in the breeding season, and feeding a brood mare while in foal are two quite different things to be considered.

We begin about the middle of March with the O. C. Stallion Conditioner and in a few days begin to increase grain allowance, and decrease the amount of hay until by the middle of April we have them on full feed, feeding three times a day instead of twice, as in winter, and by the time the breeding season is at hand he is in fine condition to transmit quality to his offspring.

As to feed, we should give him a liberal quantity of oats and bran, two parts oats and one of bran, twice a day, and once daily through the mare season a good feed of boiled barley with a little flaxseed cooked with it. Mix with bran and feed hot at night. A few raw eggs each day will be of great help to him. Give him plenty of salt, but do not feed corn, as that is not good for a breeding stallion in the stud season.

This, with good hay, and sufficient grass, should constitute his daily feed. Remember this one important matter, keep your horse healthy and as near a natural condition as possible. To do this, you must feed and exercise him properly.

As to hay, we prefer mixed hay, one-third clover, and two-thirds timothy, feed morning and evening. The stallion should be groomed every day during the breeding season, that he may look and feel fine.

As to quantity of feed, it should be governed according to the build and size of the horse, as well as to the general makeup of him. We may take two horses of the same age and same weight, one a low-down blocky horse, the other a long-legged, long-body fellow. The blocky horse will get fat on the same kind and same amount of grain that the lank horse will grow poor on. The best rule to adopt in feeding horses that I ever heard of is, good judgment, observe the peculiarities of each individual animal, and govern his feed accordingly.

The feed box should be broad and flat so the grain may spread thinly over the bottom to prevent him from eating too fast, that his health may not become impaired.

Feed is an important factor in the case of stallions. Data gathered in several states, and covering a period of several years, gave results as follows:

Kind of Feed.	No. of Mares.	Per cent. of Foals.
Corn and hay	37,000	40
Corn, hay and oats	34,000	46
Oats and hay	38,000	54
Oats, bran and hay	7,000	61
Grass and alfalfa, or both	5,000	82

Among the rules laid down one of the most important is that there must be an interval of four or five hours between meals to keep a horse in good condition.

Although it is not necessary to exercise quite so much care as to the rations given the stallion out of season as it is during the breeding season, it

should be remembered that his feeding at this time will wield a great influence on his health and general condition later on. If he be fed judiciously now, and the same care in feeding be continued when he is put to actual service next spring, he is more apt to be in fine form for breeding, and of securing a high percentage of colts that will develop into healthy, vigorous and profitable horses.

Acclimating the Horse

It may be true that all men not familiar with the fact that when a stallion or mare has been imported into this country they must become acclimated before they can be relied upon as being sure breeders. Often a change merely from one state to another produces the same effect.

If your stallion should not prove a sure foal getter the first season after landing in this country, do not get discouraged, but give him proper exercise and care; and the next season he will surprise you when he will get a very large per cent. of mares in foal that may be bred to him.

Self-Abuse of Stallions

Stallion owners can not be too careful of the horse's habits. Among the many pernicious habits common to the stallion there is probably none so vicious and so trying upon the animal's vitality as that of self-abuse, or masturbation. The very nature of the horse's service develops this habit often when quite young, and unless attended to at once, the habit soon becomes almost beyond remedy. And again when a stallion is retired into luxury

and idleness, and pampered to the extent of having him look fine to those who may chance to see him, soon develops this habit. After he has once formed the habit he is never in a fit condition to serve a mare, as he keeps himself drained of the seminal fluid, and when he does serve a mare he very often does not discharge, even when he does there is no matured spermatozoa in the discharge. Masturbation with the stallion is equal to the stallion that is allowed to serve three or four mares a day. If the practice of either is allowed to continue very long, you may as well make preparation to bury him, or a better way would be to castrate him and put him to work on the farm. There are contrivances that can be worn to prevent the horse from masturbating but it is not always satisfactory. If he was given regular work he would have something else to think about. A stallion with this habit can never be relied upon as a sure foal getter, and sooner or later the habit has drained his vitality until death is the result. Work the stallion in some way, no matter what breed, or how valuable he may be.

CARE AND MANAGEMENT OF THE BROOD MARE

THE brood mare is the foundation of the stock farm, and more than one man has made a fortune with one or two good brood mares. In the selection of breeding stock we must keep in mind the principle of heredity that "like produces like." This applies to the brood mare as well as to the stallion. Bad qualities in the mare are as likely to appear in the colt as are bad qualities possessed by the stallion.

To be successful in breeding, the breeder must study the condition of his mares, examine every doubtful one before you breed her, and by so doing you can very easily ascertain the source of any possible trouble and you should be prepared to treat them accordingly.

Caution at Time of Breeding

Caution with good judgment should be used very largely at time of breeding the mare, as there are so many chances for accidents. If the stallion is not trained properly he may strike the mare with his foot while mounting and injure her, he may come with such force and push her over and injure her in that way, and often a stallion gets injured himself. Occasionally mares become frightened and cause trouble. One of the most serious things that is liable to occur is, that the owner of the mare

who is usually holding the mare gets frightened and turns her loose and then there is liable to be trouble. Soon word gets out that a certain breeder has an uncontrollable stallion and that is not a very good advertisement for the stallion. There are not many men who wish to take chances of getting their mares crippled, and more of them do not wish to be crippled themselves. Just a little caution along this line will make the business more satisfactory and profitable instead of dangerous.

One reason why there are so many mares that do not produce is that the man in charge does not carefully examine them previous to the mating and this is too often the case with old mares that have not been bred for several years. A stallion man who understands his business, can attend to this as a rule very well, but there are occasions when it is necessary to secure the services of a competent veterinarian.

In the early days of my practice and experience in breeding the so-called barren mares, and before I had used Pregnators, was, when I found a womb to be closed hard and rigid, I would dilate it with my fingers, and after making an examination within a few minutes after, I would find the womb to be closed the same as before, and such dilating had been of no account. In order to get such mares in foal, a pregnator must be used on them.

This way of doing was an old-time theory which has simply gone into history.

Manner in Breeding

The manner of handling mares, and the manner in which they are taken to the stallion, has much to

do with the number of foals produced. A great many mares are rushed off to the stallions to be bred as soon as they show the first signs of heat. A better way would be to wait until after they have passed the middle of the heat period, then breed them; and when you do take her away to be bred, she should be led by the halter, and not hurried. Mares that are hurried to the stallion and driven rapidly home again, very seldom get in foal.

All mares are more likely to get in foal if allowed to rest quietly for a few hours after copulation.

Why we should wait until after the middle of the heat period. After the egg of the mare leaves the ovaries where it is supposed to be formed, it takes two or three days with most mares before it is deposited into the uterus, and ready to be fertilized with a germ from the semen of the stallion. When the egg starts from the ovary the mare begins to show signs of heat, and after it reaches the uterus, the heat period gradually passes away. Mares differ in the length of their heat periods, as the egg reaches the uterus quicker with some than others. Some writers have claimed that a mare will become in foal by forcing a service when she is out of season. That is absurd and contrary to the laws of nature. Breeding a mare as soon as she shows first signs of heat is another reason for some mares not producing. Some breeders are more at fault for their mares not breeding, than the mares are, simply because they do not look after them as closely as they should and return them to the stallion at the proper time. This is especially true

of farmers who have but one or two mares. The farmer dislikes to leave the plow standing in the furrow for a day or half a day during spring work while he drives to the stallion to breed his mare when she should be bred. He should remember that there is nothing that he could do on the farm that would bring him as big returns for the time spent, as to take the mare to the stallion at the proper time and have her produce a valuable colt.

Opening Mares

It is amusing to see some stallion owners undertake to open mares. There is a class of men who never read, who are doing a world of damage to so many brood mares of this country. It is not uncommon to see a stallion owner (and more especially those owning cheap stallions) have a dish of grease as a lubricator; when he examines a mare, he dopes it on his arm before he inserts his arm into the mare. There are others who use soap. Perhaps they do not realize the danger that is liable to arise from the use of these infections.

If you will just stop and consider and use a little good judgment before you undertake the operation, you should know at once that when a mare is in heat you can find enough lubricator in the vagina to supply all needs, either in making an examination or in using a Pregnator. Now let me say, and do not forget it. Before you begin operation have a bucket of warm water handy (and nothing but clean water). Wash your arm and the vulva clean, and for the good graces of the mare, keep all greases, soaps or any thing of that nature entirely away.

We would like to impress upon our readers the necessity of being more careful about opening mares. Every mare that has not got a colt by her side, however should be examined. In this day and age, every breeder should be able to diagnose the exact conditions of a mare; he should be able to give an exact reason for each mare not fertilizing.

Great care should be taken not to open the cervix of a mare which is pregnant. We cannot place too much stress on this particular feature. We are of the opinion that nearly every uninstructed breeder causes numerous abortions each year. If a mare has been bred and returned three weeks or six weeks later, showing some signs of heat, we would advise being very careful about opening the cervix of this mare without first taking a speculum and looking at the cervix. Soon after conception takes place the cervix fills with a mucous plug and a little practice with the speculum will enable the breeder to determine quite accurately whether a mare is pregnant or not. It would be a good plan to make numerous inspections of different mares so as to get this knowledge well founded in one's own mind.

After a mare has been bred, and returned for a trial three weeks later, and you lead the horse out for trial, watch the mare closely and if she appears in any way cross, take the horse away at once and do not allow him to worry her. If the stallion owner knows his business he should be able to decide at once as to her condition. I do not believe in teasing the mare very much after she has been bred. Often a mare will be safe in foal and the womb may

be in a weak condition, and by letting the horse tease her, is liable to cause her to abort within a short time thereafter.

I often think and believe it would be advisable, that there be laws compelling a man to pass a certain examination before he is allowed to stand a stallion for public use.

Periods

Some mares come in heat as early as 15 months of age, though only a small percentage will conceive under two years old. A mare should not be bred under four years old, and then she should be well cared for.

Mares three and four years of age are not sure breeders and the number of foals produced by mares of such ages are very small. This is caused by the condition of their teeth which induces an inflamed condition of the mucous membranes.

A mare comes in heat once in twenty-one days, if normal. This heat period occupies from three to eight days of the twenty-one. There is one exception to this: That is, the first time coming in season after foaling. This occurs from six to twelve days after. Those are the minimum and maximum periods I have known. This condition is thought by many to occur on the ninth day. I know of several instances as early as the sixth day, a great many on the eighth, a majority of from nine to twelve days after foaling.

A mare will almost invariably breed on the ninth day, or thereabouts, after foaling, and if she is healthy and has received no injuries in giving birth

it is the practice to breed her at this time. Just when mares should be returned to see whether they have conceived is a much discussed question. Mares differ greatly in the recurrence of their periods. It is best for each breeder to study the individual differences among his mares.

My experience has been that a mare should be tried back on the twenty-first day after breeding. If she refuses, try her once each week for three consecutive times. Should she still refuse, she may be considered in foal. The reason for the weekly trials is because a percentage of mares are irregular in the coming of the heat periods.

Take the mare to the breeding barn and find out by the aid of a teaser if she be in heat. Do not let the teaser annoy or excite her. If she is ready to breed let the stallion cover her. Keep both mare and stallion as quiet as possible, avoiding all excitement.

The surest way to get a mare settled at the first service (should she be a doubtful breeder) is to breed her with a Pregnator. By breeding in this way one can avoid having the mare miss from excitement or fear every possible injury to her colt by the stallion, which her owner can not afford to do. There are many services wasted with nine-day mares through anger or fear. This is only motherly instinct. This might not be true of stallions and mares running together on the range, but when a stallion stranger comes squealing and plunging it is only natural for the mother to try to protect her young.

Occasionally we find a mare that apparently does

not come in heat. If we could give such mares plenty of salt, we could very readily notice the heat period. All of our domestic animals require more or less salt and they should have it.

Do not feed corn during pregnation, as corn creates heat and is apt to cause abortion, if the womb should be in a weak condition.

Nor is corn a fit feed for the stallion during the breeding season.

Impure water should be avoided, and the shock that would result from the drinking of ice water is another danger to be guarded against. Give her water that has not stood in the air long enough to chill, or else take the chill from it before allowing her to drink it.

It is imperative that no foul, dusty or impure matter of any kind whatever enter her body. All roughage and grain should be clean and of the very best quality obtainable. Clover and alfalfa are the favorite forms of roughage, provided it is not too ripe and woody.

Pregnant mares are usually quarrelsome, and abortions frequently occur from injuries received at the heels of other horses.

I have no doubt that hundreds of mares are standing tied up all winter, eating timothy hay for roughage and corn for grain, and yet their owners expect them to produce a good colt in the spring. They will be sadly disappointed, and of course the sire will be at fault, they think.

Proper Feeding is Important

The feeding of the brood mare is one of the most

important items in her management, since upon it her health will very largely depend.

Feeding the brood mare is a simple matter, yet at all times requires judgment. She should work steadily at moderately heavy work. Constant, uniform work, with right feeding, is the thing. Her food should be somewhat different from that given the average work horse. Bran should enter in somewhat more largely. Clover hay free from dust and mold, should figure fairly prominent in the ration. She should be kept in fair flesh and improving, rather than losing, in weight. Owners not having paddocks or places to turn their stock out, will find it to their advantage to take time to exercise their brood mares, even if they are obliged to harness them. Exercise when possible right up to the foaling period. In fact, give mares in foal regular work of not too strenuous a character right up to the time of foaling.

The manner of feeding our brood mares has much to do with the foal production.

The following table given teaches us that a corn diet does not produce a very high per cent. of foals. Oats mixed with corn increased the foal crop by 6 per cent. Oats gave an increase of 14 per cent. as compared with corn. Wheat bran added to the oats ration resulted in 7 per cent. more foals, while grass or alfalfa with no grain gave 82 per cent. of foals. Here we can learn that the nearer we get to a corn ration the smaller the number of foals produced, while the nearer we get to a grass ration with no grain, the larger the number of foals produced. In other words, the nearer we get to nature

—that is to say, the nearer we approach natural conditions the more foals we will have.

Data along these lines secured from a different angle show quite as conclusively that corn is not good for breeding stallions. The foal crop in Missouri from the best stallions is but 41 per cent. of the mares bred, and corn is the chief ration. In Kansas it is 44, Illinois, 46; Iowa, 47; Nebraska, 49; Minnesota, 61; Ontario, 71; Montana, 72; Wyoming, 72 and Idaho 73. Here again we notice that the foal crop is small in the corn states as compared with the states producing no corn, and the large foal crop is in those states known as grazing states.

Unsound Mares

It is of great importance that the brood mare be free from all forms of unsoundness or disease that is hereditary or communicable to the offspring. Many breeders have fallen into the error of considering any broken-down, halt, maimed, blind or otherwise unsound mare fit for breeding purposes when no longer able to work. It should be said that blemishes, the result of accident, are not hereditary or transmissible and do not render the individual mare unfit for breeding. The greatest possible care must be exercised, however, in deciding whether the blemish is the result of accident or an inherent deficiency.

The Case of Maud S., 2:08¾, With Breeding Organs Deformed

There is occasionally a mare that cannot be gotten in foal, as she may be deformed in some way. I

will cite you to a case where I made an examination of a mare and found her deformed. This was in the mare Maud S. when she was 18 years old. In 1892 and while Maud S. was owned by Mr. Robert Bonner, of Tarrytown, N. Y., I was called a distance of over 400 miles from my office by Mr. Bonner to use the O. C. Safety Pregnator on Maud S. On making an examination I found that her womb was over twice as long as it should have been to be normal, and, too, it had turned back as double and had grown fast, making it impossible for her to be gotten in foal; therefore Maud S. died at the age of 26, without ever producing a foal.

This is the only case on record where a mare's womb has been found to be deformed in this way.

Maud S. was foaled in 1874, made her record of 2:08¾ at Cleveland, O., on July 30, 1885, to a high wheel sulky at 11 years old. Maud S. died on March 17, 1900, the Champion Queen of the Turf to an Old Fashioned High Wheel Sulky.

Mr. Bonner paid $40,000 for Maud S. While this mare was not one of the smoothest type, she was in fine condition and looked much younger at that time than she really was.

I will never forget the sorrel mare as I first saw her grazing in the great pasture fields on Mr. Bonner's breeding farm about three miles from Tarrytown.

On my arrival at Tarrytown, Mr. Bonner met me at the station with one of his high bred, fast steppers that took us up that long grade of elevation with terrific speed, and which I surely did enjoy.

Working the Mare After Foaling

May the mare work after the foal comes? She may, if the man who is to work he understands his business. She may work moderately, slowly, and better if no more than four or five hours a day. When she works, she should be well fed. This does not mean that she should be then or at any other time overfed. And she should be fed something that will make milk in her udder as well as repair waste in her own body. Oats are suitable as a grain ration, and wheat makes a good addition. Let the farm mare work easily, gently, moderately, if you greatly need her services, but do not let her ever become very warm or hot.

If the mare is to be used before and after foaling, careful feeding is necessary through the winter. She must have a reserve supply of vitality. She will be suckling a colt and pulling a plow, and she will need all the flesh she has when spring comes.

I am not advocating that the brood mare should be brought through hog fat, as that would be a mistake. However, letting her get along any way she can on roughage up to within a month of foaling time, and then piling corn into her will not fit her to suckle a colt and do a farm horse's work a little later on.

See that she gets enough exercise through the cold weather. Of course, if she is being used to haul wood, fodder and coal and do the general work around the place, she is getting enough exercise.

There are a few things which those who have

the care of brood mares should be careful to avoid. One is permitting them to drink too heartily of cold water. When salt is kept constantly in their mangers, and they are watered three times a day, there is not much danger. When they are salted only once a week, perhaps not so often, the danger is increased. Probably there are more foals killed prematurely in the North during the winter months from this than from any other single cause. Very few farmers are aware of this fact, however.

The management of the pregnant mare should have for its object the feeding of such a ration as will supply her demands for energy, and in addition allow ample nourishment for the development of the foal, both before and for a short time after birth, together with such a regulation of the work as will protect the mare from becoming tired, overheated or injured in any way. Moderate work is not only harmless, but positively advantageous to mares in foal. It is much better than to keep them tied in the stable, for in that case they suffer for want of exercise, or to permit them to run at large in the fields, with other horses where they are exposed to accident resulting from racing, playing or fighting with each other. If proper care be taken, the mare can be used safely at the ordinary work of the farm up to the very day of foaling, but as the time approaches it is important that the work be not heavy or the pace rapid. However, she must not be fretted by the other horses, or by rough, inexperienced hands.

The food of the pregnant mare is most important. Many persons fail of success in horse breed-

ing by depending on blood alone to improve the stock. They forget that all of our improved breeds of horses are the product of adequate nutrition as well as intelligent breeding, suitable environment, sufficient shelter and kindly care.

Nothing promotes more robust condition for brood mares than healthful exercise. It means increased nourishment and consequently more nourishment for the prospective foal, and thereby keeping her in a more healthful condition, and when wax begins to form on her nipples, get ready; keep her away from barb wire, the hillside, pond or running water, and be ready that you may be needed.

It does not really take much of a man's time to keep close tab on a mare for a few days and nights just before foaling, and the precaution frequently saves life, and that means money.

When to Breed Mares

The question as to when is the best time to breed mares often comes up for discussion among farmers who are interested in raising colts from their mares each year as a means of adding materially to their farm income. Many farmers like to breed their mares very early in the season, so that their mares will have their colts before the spring work begins on the farm, and therefore can be used more freely to help along with this work.

Question. Why do some mares breed every other year only?

Answer. Such mares will be found large milkers, and because of the system being taxed to its utmost capacity in the production of this large flow of milk,

the ova is discharged in an immature condition, a condition impossible of being fertilized. Some mares breeding only in alternate years do not come in heat while suckling their foals, but others are regular in their heat periods, yet refuse to be impregnated. These mares are more likely to be impregnated if bred at the seventh to the ninth day after parturition, than if bred at later heat periods.

A speculum will often diagnose these cases. A record should be made of the condition of the cervix at the time of breeding. The service record book should have notations indicating whether the cervix was loose or closed at service. After a few months of pregnacy the cervix seems to get shorter. Near parturition an exploration of these parts reveals the fact that the cervix is very small and short, which quite frequently looks like a small walnut.

Question. Will a mare take the stallion when in foal?

Answer. Many mares express a desire for the stallion when in foal, but it is not a good practice to breed them. Serving an in-foal mare with a rough impetuous stallion will be likely to induce an abortion. Only a small per cent. of pregnant mares will receive the embrace of the stallion some time during pregnancy without much objection. Occasionally a mare will show some signs of heat and then deliver a foal in a short time.

I have had mares of my own that apparently would be in heat at almost any time during pregnation. Such mares should be kept away from the

sound of a stallion, as the womb of such mares is generally found to be in a weak condition and by hearing the sound of a stallion, keeps him in her mind and is apt to cause an abortion. I have bred mares when their wombs were so open that I could insert three or four fingers. These mares had been bred year after year but had never produced a colt. After I had bred them I began treating them with the O. C. Abortion Remedy and they then produced colts the same as any mare.

Care of Mares after Service

This is a very important time when the owner of the brood mares should be thoughtful and cautious in getting them settled in foal. I have seen many times after a mare has been bred, when the owner of the mare would start for home driving the mare at such speed that would indicate that he had only a few minutes to get there in. In such cases about eight out of every ten would be back to be rebred, and with that same hurry to be repeated. After about the second or third time the mare has been handled in this way and she fails to get in foal the owner of the mare condemns the stallion and says harmful things of him, not realizing that he himself is at fault. I do not know of any better lesson that could be taught the owners of such mares than to absolutely refuse to breed their mares. There is another thing that should have the attention of the owner of the mare, and that is, not to turn the mare out in the pasture fields with other horses as soon as she is bred, and they should not be put into the harness and put to work the same

day they are bred. A little care, caution and forethought will save you more than many realize.

They are not in a condition to avoid the kicking and striking that may occur in the herd, and it doesn't take much of a blow, if in the right place, to seriously injure the mare or the colt in foal. Indeed, a dead or paralyzed colt at foaling time or immediate abortion is liable to be the result.

Then, a mare with plenty of mettle is liable to run and play with other horses, which may bring on over-exercise and the most damaging results. Or accidents are apt to occur by her slipping or falling, causing serious strains and other disorders more or less damaging to the mare and the colt in foal. Simply keep the pregnant mares entirely separate from all other live stock and thus avoid every possible accident.

After the mare has been bred she should be kept away from the sound of the stallion. All excitement and all hurry should be avoided if it is foals that is wanted.

ARTIFICIAL IMPREGNATION

ONE occasionally meets a man who is so wanting in the spirit of progress that he objects to any thing new.

Then there are those who fail because of belonging to a past generation. They believe a certain thing should be done because their forefathers did it. They do not believe in artificial breeding because their ancestors knew nothing of it.

Such men are frequently heard to say that the old way is the best. If the "old way" is the best, we had better go back to the time when we used to cut our grain with the sickle, our hay with the scythe. When railroads, telegraph, telephones and other public conveniences were unknown. Fortunately for the country at large the greater part of the American people believe in progress and are desirous of availing themselves of the benefits which can be applied to the work on the farm or in breeding barn.

From what I have to say on Artificial Impregnation I will show from my own experience as well as from the experience of others that artificial assistance in breeding is a positive success. In 1890 and while I was keeping stallions for public use, I invented a Pregnator to assist in breeding a class of mares that was supposed to be barren. That same season I used the Preg-

nator on seven mares that had failed to get in foal for three or four years, while being bred every year. Six out of those seven did produce foals from which I had used the Pregnator on as artificial assistance. Since then I have used Pregnators on hundreds of mares of this same class with just as good results. There are many mares owned at the present time by men who have not been able to have them gotten in foal, and their owners feel the loss greatly—and it is this kind that reach the sales ring so often. Numbers of stallions have been tried, and the results have been the same. Other owners, that have had troubles the same way, resorted to artificial impregnation, and have found it a success; but there are some men who do not believe in this and are only brought to their right minds when they see others, in similar trouble, meet with success.

There are in this country thousands of the best breeders using the impregnator system in horse breeding successfully. This has been carried on more extensively the last few years than ever before. The development along this line is wonderful, yet some owners are not willing to confess that they are successfully using the impregnator system with the best sires. There are some owners of mares who are prejudiced against this plan of breeding but many of the owners of leading sires can give authentic information along this line. In fact, many good youngsters among the trotting and pacing horses have been produced by the im-

pregnator system. It will not long be true that any man fears to announce openly that he is using this method.

It is this kind of material that causes intelligent men to lose confidence in those who are supposed to be leaders among men. What horse breeders need is encouragement to be more up-to-date in their breeding methods.

Be Honorable in Your Confession

We would like to see men who have used this method be honorable enough to state to the world that they are producing just as good horses as could be produced with the natural service. I know this is a fact. Some very absurd statements are made concerning this method of breeding and the truth should be made public.

The impregnator system is not a secret with the average stallion owner who is breeding common mares. I am personally acquainted with hundreds of these men who are producing a very large number of colts from a single sire. There are a lot of mares that absolutely cannot be made producers without some assistance.

I have handled stallions in all stages of their lives, have bred them to hundreds of mares and used Pregnators on them as artificial assistance, and I never knew of any bad results to come from their use but the good results, I know, have been wonderful.

I do believe, speaking from my long experience in breeding and using Pregnators, that the method of Artificial Breeding of to-day is absolutely the most

progressive step that was ever accomplished in all time in the whole breeding business of this country.

Think of this, do not listen to statements made by some unprogressive breeder or horse crank, study your own interests, take advice from wise breeders, use artificial means in breeding. What has been done thousands and thousands of times can be done again.

TO ALL STALLION AND JACK OWNERS

WE realize that the time has come when we cannot afford to depend upon the old time of hit-or-miss method in breeding, but that the nearest economy to them demands that they use the best help in breeding, possible to get. In keeping either a stallion or jack for public use and your own profit you cannot afford to have him compete in service with those who do have these helps.

Serving 100 mares in the old-time hit-or-miss way and only one-half of them breeding is far less profitable to you than serving 50 mares by the use of a Pregnator and all breeding. That is plainly evident to all.

When a man keeps a stallion or jack for public use it is much to his interest that all his work counts. It is then his duty to examine all mares that come to his stallion or jack that are considered doubtful breeders and be prepared to breed and treat them according to their condition, as it is the duty of the owner of the mare to pay for that service.

If every stallion and jack owner would interest themselves in this matter and do their part, as breeders, they would then make the stallion business more profitable by getting all mares in foal that are bred to their stallions. Then he gets pay

for all his stallion's work and makes a better showing for his stallion as a foal getter, and then a very large per cent. of all the so-called barren mares of this country would be classed as regular brood mares.

City Farmers

I will here give a clipping taken from one of our Horse Journals which reminds me of the man that opposes Artificial Impregnation. They are not educated in, nor have but little knowledge in horse breeding and are not up-to-date in the science and progress of the times.

The "city farmer" used to be known as a telephone agriculturist, but now you will find him with jumpers on and at work with his sleeves rolled up. Perhaps he is entirely theoretical and as impractical as possibly could be—but he takes all the farm papers, reads the government bulletins, is dead in earnest, and will learn from the mistakes he makes. Many jokes are cracked at his expense but he does not seem to mind that feature at all.

Recently a farmer friend was telling me of a city man who bought a place near his, and was just tearing things up and going at the work at a terrific pace. One day the farm foreman came to his employer with the information that one of the mares should be taken to a neighboring farm to be bred. The city man being a believer in method and time-saving replied, "Why waste time in that

way? Just wait till a rainy day comes and we will take all the mares over at once."

Another tale illustrating the lack of technical knowledge displayed by city farmers is told on one who went in for breeding mules. He had it figured out that mules were the thing to breed, and knowing that Missouri was headquarters for the big breeds, he journeyed thither and returned with a carload of mules of the female gender. His friends, upon learning of the purchase, split their sides, but it required the counsel of a veterinarian before the gentleman was convinced that female mules were not reproductive.

When we find a man talking against Artificial Impregnation, we will find that his authority is based upon theory and not from actual experience.

Below is a clipping taken from the Horse Journals.

USING PREGNATORS

Without a doubt one of the greatest losses in the breeding business is from barren mares, and official figures show that from every 100 mares bred, but forty living foals are produced—in other words the production is but forty per cent. and the loss sixty. This is all wrong and thoughtful breeders have sought a way to overcome this great loss. Leading stallioners all over the country have taken up the use of the pregnator, and not long ago the editor of this paper overheard two of Ohio's leading stallion owners state that they use the pregnator regularly and each stated that the results had been far in advance of their expectations, and highly satisfactory and very profitable.

Stallion owners should use every appliance that will increase the number of foals secured by their stallions for two reasons—first, because their own income will be increased, and second, the income of the breeder is increased. If your horse serves fifty mares and forty are returned in foal, he is giving a more satisfactory business than if he serves 100 mares and gets but fifty of them in foal.

After years of experience with stallions, and after he had found the large number of mares that are barren, to be constantly increasing, Mr. O. Crittenden invented the O. C. Safety Pregnator, which has proven the best thing ever made of its kind and with which the breeders everywhere have increased their colt production in an amazing percentage. The O. C. Safety Pregnator is absolutely safe, reliable and easy to operate, and no breeder can afford to be without them. Mr. Crittenden has just issued one of the most valuable books we have ever been fortunate enough to secure, and which contains page after page of very interesting and valuable instructions to breeders.

CARRIED THE SEMEN 50 MILES

FOR the benefit of the readers of this book I will here give copy of a statement published in one of our Horse Journals, of two men living fifty miles apart, one owning a stallion, the other a mare. The semen from the stallion was sent the fifty miles and injected into the womb of the mare referred to, and she became safe in foal from this operation.

MAIL ORDER BREEDING

A matter of some interest has been given a successful test by Linn Hill Park Farm, L. H. Pickard, proprietor, Harlan, Iowa, recently. It pertains to breeding by mail order where inconvenient to get the animals together for normal breeding, or use of impregnator. The experiment in this instance was made with the farm stallion, Capo 2:14¾, and a thoroughbred mare owned by Mr. T. J. Cunningham, Lanesboro, Iowa, fifty miles distant. The common breeding bag was employed, which after being charged in the usual manner was conveyed at once to the home of Mr. Cunningham, and by the use of the impregnator the mare was bred from the contents which had been carefully preserved at the normal temperature by keeping the retaining bag in close contact with the body of the messenger bearing it. There can be no reasonable doubt that this method can be practiced with an average degree of success with

impregnator breeding, the one problem to be solved being to avoid change of temperature to an extent destroying the sensitive germ life of the seminal fluid. However, many breeders have practiced with very favorably results artificial impregnation of mares where present and involving only the time for manipulating the breeding devices. The home-owned mares of some of our popular stallions have been bred in this manner regularly with even a greater certainty of becoming in foal than when stinted to the horse. The matter of time elapsing where mares are at a distance not necessitating a period of several days will not militate against a successful issue if the problem of temperature is nicely adjusted. Transmission through the mails, or by express, as has been suggested, and we believe attempted, is connected with much greater difficulties than where a messenger may be dispatched employing the method used by Mr. Pickard and Mr. Cunningham.

Following is a copy of a letter written by Mr. L. H. Pickard, Sec., Shelby County, Fine Stock Exchange, Harlan, Iowa.

Mr. O. Crittenden,
Ashland, O.

Dear Sir:—Replying to your letter of recent date will say that I have had some experience with Artificial Breeding, and have been fairly successful. I believe, however, in order to get the best results one should arrange to have the best sanitary conditions possible, which the average breeder does not possess. We have been quite successful

with the impregnator in breeding mares brought to us and have gotten mares in foal that had not been breeders. A valuable standard bred mare was brought to one of our stallions "Capo," she was twenty-two years old and had been a regular breeder every other year, never getting in foal the year she suckled. She had not had a colt for two years. We bred her and used the Impregnator. She got in foal, and the next year we bred her again using the Impregnator and she foaled a fine colt the next spring. We again bred her and the following winter she died and was again in foal at the age of 25, getting in foal three consecutive years after missing two years when past twenty years of age.

We have had limited experience in transporting the semen. We made a shipment by express in a thermal bottle to the Iowa State Agrl. College. The bottle got broken in transit so that the artificial heat was lost.

The College received the shipment twenty-four hours after it was broken, the semen was put under a microscope and there were live sperms but too weak to prove fertile. I am confident, however, that it is practical to transport the fluid in a thermal bottle a reasonable distance.

Linn Hill Park Stock Farm,
L. H. Pickard, Prop.

ARTIFICIAL DEVICES A SUCCESS

ARTIFICIAL Impregnation has become a practical thing. With our Artificial Impregnating Device of to-day, the prejudice formerly existing among mare owners against the use of Pregnators is rapidly passing away, as the breeders of this country have seen and have already been convinced that using artificial assistance in breeding, is a positive success; and to-day many of the most successful breeders and stallion owners are using Pregnators as artificial assistance in breeding, as a Pregnator is an up-to-date necessity. Breeding becomes more and more scientific and careful every year. The progress of the times demands it.

Some amateur breeders may not understand the nature of the breeding organs of either the mare or the stallion. I will give cuts showing the shape of the womb as it appears while in different conditions, and where the womb is located in the vagina.

No. 1

This cut No. 1 shows the womb as it is in a normal condition.

The subject of barrenness in mares is of greater importance than one would suppose at first thought. Only those who are engaged in the breeding business—those who have handled stallions in the stud season—those who are professionals, who have been called upon to treat such cases, can comprehend the extent and nature of this subject—Barrenness.

When a mare's womb is so closed that the semen cannot enter at time of service, there is no stallion living that can get such mares in foal without artificial assistance.

All mares that do not produce are not barren only so far as not being treated for the cause and restored to a normal condition. If artificial means were used to assist nature they would produce the same as any mare.

TWO CLASSES OF BARREN MARES

THERE are two kinds of the so-called barren mares. One having the womb too closed and cannot receive the semen from the stallion or jack at time of service.

No. 2

Cut No. 2 shows the womb as it is when closed hard and rigid.

The other is just the opposite, too open and flabby as in cut No. 3, and in a weak condition, with no strength nor vitality to close and retain the service after the mare has been bred and become in foal.

When a mare's womb is normal, you can only insert one finger, and when it is too open, you can insert from two to four fingers, and when it is too closed, you can scarcely insert one finger.

With some mares their wombs are too closed,

some too open, occasionally one deformed. To know these things one must examine and then treat them accordingly. You cannot expect to be successful in breeding unless you understand the condition of your mares, and treat them for any misfortune that may be only temporary.

No. 3

Cut No. 3 shows the large open womb as it is when in a weak and shapeless condition, as it has no strength or vitality to close and retain the service. This class of mares are much more difficult to get to produce than those with a womb too closed.

Stallion owners from all parts of the United States complain about getting this class of mares to produce. The large open womb is far from being in normal condition and such mares very seldom produce without being treated for the cause. This is explained more thoroughly under "Abortion Remedy" in this book.

Cut No. 1 shows the womb in normal condition,

and Cut No. 4 shows the O. C. Safety Pregnator being inserted into the womb when it is too closed. After the Pregnator has been inserted into the womb of this class of mares, it holds it open so the stallion can inject the semen through the Pregnator into the

No. 4

womb or breeding sack. This assists nature and makes the coupling natural and as nature intended. After the O. C. Safety Pregnator is placed into the womb, ready for the service of the stallion, it does not change the position, shape or size of the womb, therefore it does not interfere with the Stallion or Jack at time of service.

Cut No. 5 shows the Pregnator after it has been placed in the womb ready for the service of the stallion. When the womb has become closed hard and rigid, such mares cannot be gotten in foal without artificial assistance.

Nature's Complete Service

Will also explain how nature intended for a complete service. When all of the breeding organs are

in a normal condition as shown in Cut No. 1 then the coupling is made according to nature. It is claimed that all things were made for a purpose (and I think we all believe this to be true). Then we must admit that the shape of the womb was made to correspond with the shape of the end of the penis and for them to unite at time of service.

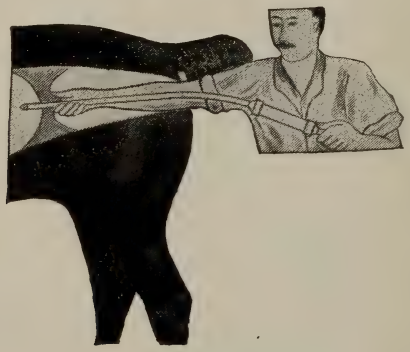
After the penis enters the vagina and as it approaches the womb which is located at the far inner end of the vagina it brings the womb and penis to a center at that point, and by the time the penis has reached the womb it has become enlarged so as to fill the space around the womb and forces

No. 5

the two to come together in exact line and then the end of the penis telescopes over and around the neck of womb then all parts fit together perfect, and the coupling is then made complete just as the great Ruler of this universe intended.

The stallion then injects the semen into the

womb proper, when the germs in the semen come in contact with the egg of the mare and they then become fertilized. Some people may dispute these points. However, I know them to be facts, and I have abundance of proof of these facts. These statements are not given from theory, they are from the knowledge from actual proof.



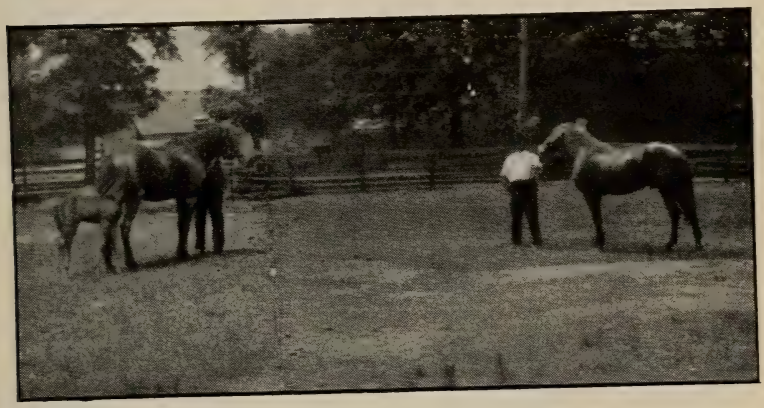
No. 6

Cut No. 6 shows the O. C. Improved Reliable Pregnator that is used to assist in breeding a dozen or more mares from one service of the stallion. This is done by first drawing the semen into the Pregnator from the vagina of one mare after she has been bred by the stallion. Then by carefully distributing the semen from the pregnator into the wombs of a dozen mares or more they will all become in foal from that one service of the stallion, and if so desired the semen can be taken hundreds of miles and deposited into a mare and she will become in foal, if the semen is kept at a certain temperature, at about 100 degrees of heat. There remains no longer a ques-

tion of doubt in this method of breeding as it has been successfully done thousands and thousands of times.

It is impossible to live up to any one set of rules and make a success of the breeding business. One has to study the individuality of the horses in his charge, and this applies to both stallions and mares. In regard to the mares, cleanliness is the great essential. All instruments used in connection with breeding operations should be thoroughly sterilized previous to being used and should be thoroughly cleaned after being used. This will save lots of trouble.

Foals from Old Mares



It is generally accepted that a mare will produce, during her natural lifetime, from 16 to 18 colts or more, and if we expect her to yield her natural production, then we must not expect her to begin too young. Nor, on the other hand, can we expect her to begin too late in life and live up to any such quota.

I will here give copy of a letter received from Mr. J. A. Watkins of Warren, Ark., who owns the colt and its sire shown in the above cut.

A Mare of Great Conformation

Warren Ark., Sept. 2, 1913.

MR. O. CRITTENDEN,
Ashland, O.

Dear Sir:—Responsive to your favor of recent date I am enclosing a picture of Dolly Dunn, aged 35 years and the only foal she ever produced, and Clay Gentry, its sire. This mare was turned to Clay Gentry on May 30, 1912, and the colt was foaled on May 15, 1913. The mare is 35 years old, and there can be no doubt as to her age for she has been in the family 31 years. She was bought by J. W. Falls of Memphis, Tenn., when she was four years old, and he kept her 22 years and then gave her to his sister, Mrs. J. S. Dunn, of Warren, Ark., who has had her in Warren, Ark., 9 years. The mare was in Matinee races in Memphis 30 years ago. The colt is a very classy looking youngster and will be allowed to go as a stallion. His sire, Clay Gentry, is 6 years old. His grandsire, John R. Gentry, is 22 years old. His great grandsire, Ashland Wilkes, is 30 years old, making four generations living.

Very truly yours,
J. A. WATKINS.

Below is a list of old mares that have produced foals at ages ranging from 25 to 33 years old.

Miss Russell, the dam of Maud S., died at the age of 33 years after producing 18 foals.

Nettie King dropped he 16th foal in 1913, at the age of 27, and again in foal.

Bertha, died at the age of 27 after producing 19 foals.

Missouri Maid, in foal at the age of 27.

Jessie Pepper dropped her 18th foal at the age of 28.

Brown Silk dropped her 16th foal at the age of 23 and again in foal.

Waterwitch died at the age of 28 after producing 18 foals.

Beautiful Bills died at the age of 25 after producing 18 foals.

Sally Feagles, produced a colt at the age of 33, the cover of her own son.

Cyclone died in foal at the age of 29.

Minnie Chester in foal at the age of 30.

Jessie, by Bates Emperor, produced a foal at the age of 33.

Easter, by Trample, at 26

Primrose, by Abdallah, at 28.

Green Mountain Maid at 25.

Minnehaha at 27.

Fanny Jackson at 26.

Maid of Clay at 25.

Sally Brass, by Geo. Wilkes, at 26.

Madline, by Hamiltonian 10, at 26.

Sorrento by Grand Sentinal, at 27.

Wilhelmina 2:11 1-4 was first bred at 2 years old and produced her 16th foal at 20 years old.

Korez S., now in foal at the age of 25.

A great many breeders consider a mare at the age of 20 too old to breed, while if in good healthy

condition they are of the very best type for a brood mare. Kindness and care has much to do with our brood mares if we expect them to produce 16 or 20 foals during their natural life time.

Twin Foals—Mule and Horse.

An account of the unusual production of a mule and a horse foal as twins is thus recorded by E. E. Morgan, Massac Co., Ill.:

"Nathan McBride brought one mare to my breeding barn and bred her several times to the jack. She failed to settle and July 29 he brought her back and asked me to serve her with both the jack and my Percheron horse, which I did. On June 18, 1912, Mr. McBride went to the pasture and found one bay mare mule, also one sorrel horse colt foaled by the same mare. The height of the mule colt was 34 inches; the horse colt was 32 inches. This is certainly a fact as I went out to his farm and saw them for myself, and when I got there there were twenty-five or thirty persons already there to see this sight. Mr. McBride is a farmer whose word is accepted by all who know him."

Such an occurrence is of course due to the fact that the mare developed two ova, one of which was fertilized by a spermatozoa from the jack while the other happened to unite with a spermatozoa from the horse. There is nothing strange or freakish about this case. It merely is not common. Dog breeders know that bitches when lined with two different dogs will produce some pups sired by one dog and some sired by the other. The

mare in question had ripened two ova and both would likely have been fertilized by either the stallion or the jack, had only a single service been allowed. No one can tell how it happened that each ova met a different fertilizing germ.

The effect after Producing a Mule

I have often been asked the question as to mares not getting in foal from a stallion after she has produced mules.

It is all wrong to suppose that mares will not breed to a horse after having foaled mules. It is equally erroneous to believe that any "taint" or "impression" is left from conception to the service of a jack, so that the future foals by a horse will be marked for the jack. That old bugaboo of an idea should be gotten out of your head.

This has been perfectly disproved by the elaborate experiments of Prof. Cossar Ewart of Scotland and by other scientists, who mated ponies and zebras in every possible combination, but without obtaining one pure horse colt afterward that showed any trace of zebra markings. Breed the mares to good stallions and they will conceive and bring forth pure horse colts showing no markings of the mule.

CARE OF THE COLT AFTER FOALING

IN speaking of the foal before it comes into the world, and after. The man that neglects to look after his mares at foaling time, which very often needs care of the man (who should be in attendance) to save the life of the new born foal, is the man who does not read the Stock Journals to get the experience or valuable information along this line, from men who look after their brood mares and foals, and has every thing in readiness for them when needed. It is generally the man back on the farm that has the largest per cent. of loss of foals. They are lost for the very reason that they are careless in making preperations for their arrival, and in the way their mares are handled before she foals. Some farmers at foaling time leave their mares tied in the stable with other horses and are allowed to cast their foals there. The little foal in their first effort to get up is apt to slide around and get under some of the other horses in the same stable and are often trampled to death, and again the new born foal often need the care of the man in charge, that it does not smother in the sack. Sometimes the foal will come weak and needs help that it may soon get to the mare and obtain her milk.

Mare's First Milk

If the foal obtains the mare's first milk that will ordinarily arouse its digestive tract to suf-

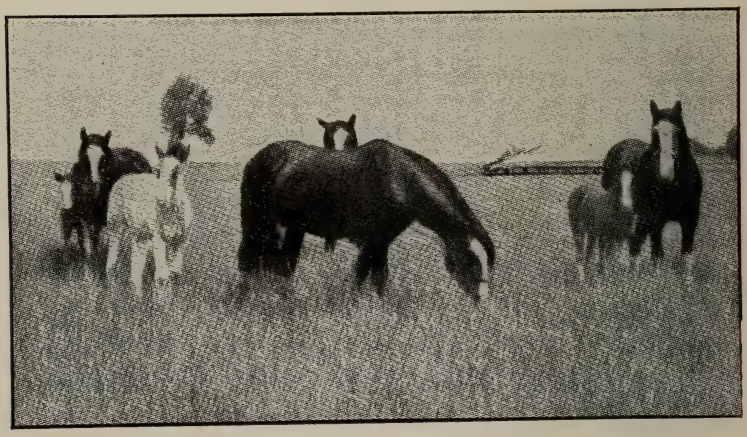
ficient activity, but if this remains sluggish for as much as twenty-four hours it will be necessary to administer a couple of ounces of castor oil, or give soapy injections. These two points in the care of foals cannot safely be neglected.

At foaling time it is better to let the mare have her own way. Nature is a great caretaker, and many a nervous mare loses her foal because the man in charge tries to give her too much assistance at this important period. Of course, there are times when a mare must have assistance, especially when the foal comes wrong, but whenever things move right, the less people there are around the more successful is the foaling. Nature has provided even young mares with an instinct that enables them to sever the naval string in a proper manner and much better than man. I like to have the mare in a place where I can observe her without her knowing it, for if she thinks there are others around, either men or horses, she may become nervous and not attend to her duties as she should and as nature intended.

There are dozens of little things about a breeding farm that must be attended to, but common sense will dictate the answer to the most of the questions that arise. Always bear in mind, that Nature is much wiser than man and that in their natural state, mares pass through the foal period with little trouble. The great trouble is that mares are kept in a state removed from the natural one, and that the result is that we have to make allowances accordingly. After the foal has arrived, it sometimes happens that the mare will not own her

own colt and will not take care of it. This happens more often when there has been assistance at the birth. In such rare instances, the colt should be brought to the mother and the latter must be forced to own it and mother it.

After the colt is a week old the most critical time is passed and if the weather is favorable you may turn mare and foal into the pasture. If there are other mares and colts in the field, care must be taken that the mother sticks to its own colt.



Sometimes they display a fondness for the colt belonging to some other mare and often it is necessary to place the mare and colt in a separate paddock.

One in a small grass paddock, shaded by a few trees and near the watchful eye of the master, is a good place for the mare and foal to be during fine weather, and in a large box stall they should spend the time while storms endure. The outdoors—the fresh green grass—the fresh air and

plenty of water and shade are the ingredients that go to make good colts. Grass, yes grass, and if possible more and better grass—that is the stuff for the mare and her foal. If you are not in a land of natural and abundant grass, why, make grass. That, fortunately, is easy. Feed the pasture. Use the manure spreader, use limestone, use phosphorous, use bone. If bone is not in the soil, it will not be in the grass. If bone is not in the grass, it will not come very abundantly to the colt. So put bone-meal on your colt pastures.

Another thing to keep in mind is to accustom colts to strange sights and sounds as early in life as possible—automobiles, autocycles, trolley cars, trains, etc. If a pasture can be used near such objects, it will be a good thing. If not, take the young animals as often as possible where such things can be seen and heard. Such treatment will tell greatly in the ease with which colts become "road-wise" when put into the harness.

In the early care of the colt, then, we must be careful to accomplish two things. We must keep him growing rapidly and we must be getting him used to being handled, so that when he is put to harness later he will have confidence in his master.

Raising Colts for Profit

No man can afford to grow a colt and not care for it properly the first winter. If properly cared for the first winter, allowed all the pasture it wants the next summer, and given any sort of decent treatment, the second winter, its development is reasonably sure. Don't spoil it all now by

sudden weaning, by too close confinement, by an improperly balanced ration.

The feeding and care of the sucking colt are rather simple. The feeding should be done mainly through the mother. Feed her liberally, especially if she be at work, and let the feed be rich in milk forming substances. If it be convenient, a good pasture is the best place for both mare and colt. If you have a colt, of which you are proud, don't tie it up in the stable in the winter and feed it corn and your best timothy hay, depriving it of exercise. You can make it fat and sleek and plump in this way; but you don't grow colts for fat. You grow them for muscle, and you cannot develop muscle without exercise.

Shall the colt follow its mother as she walks in the plow or cultivator? No, emphatically no. Leave the colt in the cool and shaded orchard, or in the quiet box stall. Take the mare to it at least once in the middle of the half day and let it suck while she rests. Do not hurry her back to her task, either. Very soon both mother and foal will become resigned to this system of living and neither will fret much. The colt will be nibbling the grass, even munching oats instead of wearily plodding the endless corn rows with its mother, under a too ardent sun. Is it best that the mare should work? No, it is better that she should give all her energy to making milk for her foal, but this is not always practicable on the general farm.

The foal soon learns to eat. The earlier he learns to eat oats the better, and the more he eats of them while sucking his dam, the better.

Add wheat bran to the oats. The bran has a lot of bone in it, and truly marvelous will be the effect on the young and fast developing animal. Gain made then, during babyhood, will assuredly never be lost. Nor can ground lost then by neglect be regained. Wonderful is the effect of feed on the frame of the baby horse. The first two years fix the bone framework—no subsequent feeding can materially alter it—and the first six months give an impetus toward development absolutely essential if the highest results are to be reached. Feed the mare, then, and as early as you can feed the foal, too. Then will "weaning time" be passed by so easily that neither groom, nor foal, nor mare will regard it as more than a trifling incident.

Train the Foal

Training should begin as soon as the colt is foaled. Its first impression of man should be that man is its friend. The colt should be so treated that when the man in charge of its dam goes to the paddock, the foal will come up to him without fear of harm. This training is very important, as this part of the colt's life has a lot to do with how it will be weaned and broken.

There is always a period of wet or bad weather when a few hours can be well spent in teaching the young animal the meaning of the halter and the leading strap.

The training of domestic animals should begin when they are young. Growth and training should proceed together. In training animals, strategy will prove better than brute force. Habit is with animals

as with man, an iron-handed master. Animals designed for various purposes may be trained until their functions are performed as a mere habit. In fixing habits, great care must be used that bad habits are not taught. All animals of high breeding are highly nervous in temperaments, but learn readily and remember well.

A habit, whether vicious or otherwise, once learned, will be returned to or practiced by such an animal long after it is supposed to have been forgotten. "Good Spirits" in all kinds and breeds of animals, is a significant term, and is well understood by all competent herdsmen and should be preserved. This condition cannot be maintained in any animal when not properly trained, fed and cared for. Even a prize brood sow or boar should have good spirits, an elastic step, a quick, gentle eye, and handle well when before the judges at the show ring. It requires training to produce a good show animal. Disposition, kindliness, action and appearances all count in the show ring, and may all be greatly improved by good training on the part of the herdsman who has charge of the animal exhibit.

At this point we want to say we make a great mistake to think any sort of a man will do to work with the colts. Sometimes we say, "Oh, he is a green man, just put him in the colt barn." Now, the actual truth is, there are few, and very few, men fit to work with colts, therefore, we should pick out the very best, sober, quiet, easy going, mild tempered and soft voiced men to put with the colts.

Teach the colt these three cardinal principles:

First, that man is stronger than he; next, that man is to be obeyed; then that the man is his best friend. How will you best do this?

While the foal is very young and very ignorant, catch him, putting one hand at his breast and one hand behind and hold him gently, letting it see how much stronger you are than he. Repeat this lesson now and then. The colt will never forget; he will instinctively associate you with the idea of great and irresistible strength. While he is young, break him to halter. There is no other time so good.

Then be good to him. Take him some dainty he likes to eat when you go near him. As in man the way to a colt's heart is through his stomach. Take time to fondle him, let him love you, but do not let him become in any way unpleasantly familiar. See that while he loves you he at all times implicitly respects you.

Then some day when it becomes time for that colt to be harnessed, there will be no "breaking" needed, only getting used to feel of the harness, the pressure of the collar, the rattle of the wheels. Their keepers can easily spoil the new-born foals upon the farm—may make them or may mar them. It is easy to build them up brave and bony and strong—it is easy to stunt and starve and maim. Let us make them good. Let us bury the barbed-wire under the sod; let us put the babies and their mothers half-knee deep in strong grass all starred with clovers. Let us give shade and nourishing tidbits and wise, loving care, and when it becomes a horse it will not forget the lessons it learned while young.

One of the first essentials in early training is to bring the animal to depend upon the herdsman. Food, water, care and training should mainly be performed by one person. A feeling of dependence instead of independence should be cultivated. There should be a strong friendship, a familiar acquaintance, and the fullest confidence of the animal. The dog, our best-trained animal, comes at his master's bidding; is held in check by his voice without halter or rope, and obeys a beck or signal, even when excited or impatient. The same may be done with the horse or other animals with the same long- continued pains and care, the same friendly feeling, the same fondling and interchanging of love and affection.

There need be no fear of unreturned affection. All of our domestic animals love naturally the hand that cares for them and the voice that calls them. One-half of the labor required in caring for them is accomplished when the animals have confidence in and also have a thorough understanding with the herdsman. Such confidence is always sought by good, capable herdsmen, men who understand all of the influence governing animals, no matter how well and thoroughly they may be trained.

Thus is there need of kindness and care. The mothers of them well know this. They are full of maternal solicitude and their behavior with their great babies is most beautiful to see.

KINDNESS TO THE HORSE

THERE are four things that are very cheap and are not used enough in handling live stock—kindness, sunshine, fresh air and pure water. These are all necessary, but perhaps the one used less and worth more in maintaining live stock is kindness. Animals that are not abused or afraid of their master will live on less feed, thrive better and are usually more easily handled. On many farms, horses, especially, are abused and roughly handled when it is not necessary. There are many hired hands handling live stock that cost their employer more money by their coarse method of handling live stock than their salaries amount to.

When one visits a farm and all of the live stock is gentle, so that they can be easily approached, and glad to see their master, it is evidence that they are getting full value for their feed. But where animals are excited and jump every time they are spoken to, or something moves, the digestive organs are not working as nature intended. A horse is of a highly nervous temperament, perhaps more so than any other animal. Horses must be handled firmly, but at the same time kindness is a necessity.

While the horse cannot speak, he shows intelligence and greatness, and that should raise the horse in the estimation of man. It should be an object lesson to people who have to do with man's noblest friend, the horse. It preaches a powerful sermon on what kindness means to our dumb animals, and what it will accomplish when rightly applied.

KINDNESS TO THE HORSE SHOWS GREATNESS IN MAN. When a horse's useful strength is gone, do not turn him out to starve, freeze and die, but care for him as you would wish to be cared for. He has served his useful days for you and now deserves care and kindness until that time may come for him to die in a peaceful and natural way.

Feeding the old Horse

The old horse does not always receive the proper attention in regard to feed. The condition of the teeth of old animals makes it imperative that this point be not neglected. The old horse cannot masticate some kinds of food, especially corn, thoroughly, nor can he eat his ration in as short a time as can a young animal whose teeth are sound. So, unless some ground grain is provided for him and he is given sufficient time to eat his meals when worked he will fail to get the full benefit of his food, and in a short time will begin to lose flesh and strength. It is especially important that the proper attention be given to this matter. When the horse begins to grow old, give him just as good care as you did when he was young and he will more than pay for his feed and care by the work which he can perform. He cannot make as good a showing as his younger mates, perhaps, but this should not be expected.

Good Horse Sense; The Prayer of a Horse

To thee, my master, I offer my prayer: Feed me, water and care for me, and when the day's work is

done, provide me with shelter, a clean, dry bed, and a stall wide enough for me to lie down in comfort.

Always be kind to me. Talk to me. Your voice often means as much to me as the reins. Pet me sometimes, that I may serve you the more gladly and learn to love you. Do not jerk the reins, and do not whip me when going up hill. Never strike, beat or kick me when I do not understand what you want, but give me a chance to understand you. Watch me, and if I fail to do your bidding see if something is not wrong with my harness or feet.

Do not check me so that I can not have the free use of my head. If you insist that I wear blinders so that I can not see behind me as it was intended I should, I pray you be careful that the blinders stand well out from my eyes.

Do not overload me or hitch me where water will drip on me. Keep me well shod. Examine my teeth when I do not eat; I may have an ulcerated tooth, and that, you know, is very painful. Do not tie my head in an unnatural position or take away my best defense against flies and mosquitoes by cutting off my tail.

I can not tell you when I am thirsty, so give me cool, clean water often. Save me by all means in your power from that fatal disease—the glanders. I can not tell you in words when I am sick, so watch me, that by signs you may know my condition. Give me all possible shelter from the hot sun, and put a blanket on me, not when I am working, but when I am standing in the cold. Never put a frosty bit

in my mouth; first warm it by holding it a moment in your hands.

I try to carry you and your burdens without a murmur, and wait patiently for you, long hours of the day or night. Without the power to choose my shoes or path I sometimes fall on the hard pavements, which I have often prayed might not be of wood, but of such a nature as to give me a safe and sure footing. Remember that I must be ready at any moment to lose my life in your service.

And finally, O my master, when my useful strength is gone, do not turn me out to starve or freeze, or sell me to some cruel owner, to be slowly tortured or starved to death, but do thou, my master, take my life in the kindest way, and your God will reward you here and hereafter. You will not consider me irreverent if I ask this in the name of Him who was born in a stable.

Weaning the Foals

It will soon be time to wean the foals, and as there may be some small breeders who are readers of this book that are raising their first foal, and have never had experience in weaning foals, a few suggestions on that subject may not be out of place.

After the foal comes, and the weather is favorable, the best place for both mare and her foal is in the pasture field, as that is the nearest to nature. In a short time the foal should be taught to eat grain. It will very readily learn this by feeding the mare, and when weaning time is here he is prepared for that.

Many breeders prefer to wean the foals of such

mares as are regular breeders, when the foal is four months old, but on some breeding establishments the foals are allowed to run with their dams until five months old.

Small breeders who raise but two or three foals a year should have a strong but pliable and well fitted head halter for each foal, and have the youngsters so thoroughly halter-broken that each will stand quietly when hitched in a single stall.

The foal should be kept growing every day and even during the weaning period.

The weaning of the foal should not be attempted until it is ascertained that he is capable of maintaining himself. The age at which this may take place will be much affected by circumstances and beyond the foregoing no hard and fast rule can be laid down. Though probably in the majority of cases from four to six months is most suitable, this must be subject to considerable variation. For the mare and the foal it is better to do the weaning gradually than suddenly, the mare's diet being somewhat curtailed during the process, and so easing of her milk, which is also favored by prolonged intervals of absence from the foal, and incomplete withdrawal of milk.

It should be our aim, during the entire colthood of the animal, to make him thoroughly familiar with mankind, and to keep him growing rapidly. This is an important point. The rapidity of growth determines to a very large extent the ultimate size of the animal. An animal half starved in youth can never be exceptionally large.

A very successful and easy way to wean a colt is,

take a strap four to six inches long drive a dozen flat head nails about three-fourths of an inch long through this strap, then rivet it onto the nose strap of the colt's halter, let the mare and colt run together and in a short time the mare will have the colt weaned. The mare should be milked, say a couple of times a day, gradually making the periods between times longer, and in this way the colt will soon be weaned and neither mare nor colt will make any fuss about it.

Having weaned the colt, what next? Keep it growing right straight along. You can do this by using a properly balanced ration and giving it plenty of exercise. Give it good shelter in winter during stormy weather. Allow it to graze as soon as there is grass to be had in the meadow or pasture, or corn blades in the corn field; but keep it growing. Of course, you must feed it a balanced ration. The grain that is nearest balanced in itself is oats. If your colt has been well bred and has had no setback, it will pay you market price for oats, no matter what that price is.

Raising an Orphan Foal

Sometime you may have an occasion to raise an orphan colt, and you may not be familiar as to how to proceed in a task of that kind. A colt is much harder to get started than a calf. It requires constant watching for some time, and it should be fed often.

Cows' milk may be used for orphan colt raising, provided it is poor in fat, from a fresh cow, well sweetened with sugar, and having lime water added

at the rate of one ounce per pint. Feed it in small quantities often and be careful to keep the milk utensils clean.

The milk should be from a comparatively fresh cow that does not give rich milk. One should use about one-fourth as much water as milk and add one dessertspoonful of common white sugar to each pint of the mixture. Limewater is useful to correct acidity of the stomach, prevent scours and probably to aid in the production of strong bone; at least foals thrive better on artificial feed if limewater is given. It is well to make a quantity of limewater, using a chunk of quicklime. This is slaked with water and then more water is added to that. After the sediment settles one dips out of the top of the vessel for the foal, adding more water as the original supply is used. As long as there is a distinct sediment in the bottom of the vessel the liquid above will be a saturated solution, and that is what is wanted.

In mixing the feed for the colt, it is probably best to use about three tablespoonfuls of limewater to the pint. The sugar should be thoroughly dissolved, and a good way to prepare it is to put the sugar into the cup first and add enough hot water to dissolve it. Then add the limewater and enough water to make one-fifth of a pint; put in enough fresh milk to make a pint altogether and warm to blood heat. For a foal a week old feed every hour and a half, half a pint at a time is enough to give. For a foal just born, give half that much and feed every hour. If it does not scour or show other signs of digestive troubles the amount should

be increased. As it grows older it may also be fed at longer intervals and after a few weeks the lime-water and sugar may be tapered off and discontinued.

The colt will almost surely get scours at some time even with the most careful feeding. If indications of this are seen in time, substitute water for milk for one feed and then reducing the amount fed for a time will check it. If not caught in time to avoid trouble, feed as described and give a dose of castor oil, 2 ounces for a very young foal and 3 or 4 for one a month old.

Use such agents as whisky to keep up the strength of the colt with subnitrate of bismuth or prepared chalk to allay the irritation of the bowels. Small doses of laudanum may be given if the discharges become watery and there is much straining, but one should be careful not to check the bowels too quickly. Always be careful that the colt is kept in a warm, sanitary place with the proper exposure to sunlight.

For feeding the foal a nipple may be used on a bottle or a nipple, rag or glove finger attached to the spout of an old teapot. It can soon be taught to drink from a pail and may take to this quite naturally. The colt should be encouraged to eat grain, hay and grass at an early age and should be regularly fed all the oats and bran it will eat. When it is two or three months old the milk may be gradually changed to sweet skim-milk and by that time there is not very much danger of overfeeding.

Teaching to Lead

For the benefit of some amateur breeders, I will here give a very quick and easy way to break a stubborn colt or horse to lead.

Take a ¼-inch rope or cord about 25 feet long, at one end of the rope tie a small iron ring, put that end around the body just in front of the hips, put the rope through the ring so as to form a slipping noose and when it is tightened the ring will be at the flank giving more purchase in tightening. Then run the rope between the front legs and up through the ring in the halter. Take hold of the rope and pull steady so as to tighten around the body and after a short time he will begin to pull back then rear up and lunge forward. He is then ready to follow you for fear it be repeated.

Fall Foals

It is claimed by many breeders and farmers of experience that the fall foal will do better than the one coming in spring.

One advantage at least in having the foal to come in the fall is that the mare will not have so much work and heat to endure during the lactation period and that she will be in a better condition to supply more nourishment to the foal. The special advantage at this season will be that the mare will not likely become excessively heated at work, and hence the digestion of the foal is not apt to be deranged.

Where the mare is bred in the fall the time should be delayed so that the foal will come after most of the flies have died, as many flies biting a young

animal will worry it and cause it to become stunted sooner than anything else. Also, as soon as the fall foals begin to eat solid food, it should be encouraged and fed liberally so that it will grow and be in good flesh for the coldest part of winter. Provide it and the mare with a warm and dry stall during the winter, and feed some bran and oats regularly to furnish milk forming material mineral matter for good frame.

Good mares are scarce and their produce valuable, come when they will. Many of these fresh mares will very readily get in foal nine or ten days after colt is weaned and raise a good fall colt. Some condemn fall colts, saying they are too much trouble and no good. If you are fixed for fall colts, having good, big, roomy box stalls, you can raise a fall colt almost as cheaply and with far less trouble than a spring colt. The colts that give us the least trouble are fall colts, either sold off of mare in spring or turned on good fresh grass, then you ought to see them grow, with some grain, of course. Mares are not doing much during the winter months, so that they and their colts can run in lot in nice weather and in box stall the rest of the time. Understand, mares that are good sucklers will raise fall colts best. You will also need to supply some of the lack of pasture with bran mashes once a day, clover hay, a little silage (very little), oil meal and anything that will increase the milk flow.

There are certain mares that do better with fall

colts. First, very heavy sucklers; second, mares that have to work very hard during the summer; third, every other year breeders will allow you a colt between.

A fall colt gets a year's growth without any interference. When it is old enough to wean it goes on grass and keeps on growing.

WATERING THE HORSE

ANOTHER matter about which much diversity of opinion exists, is how and when to water the horse.

"When a horse is thirsty, he wants a drink." This is probably the very best guide for the attendant and certainly an acceptable one to the animal itself.

They All Want What They Want When They Want It

There is a great deal of exaggerated fear about watering horses when warm. When a large amount of perspiration has been secreted while working, it leaves the system parched. A pail or two of water of moderate temperature is the best thing that can be given, and ordinarily they should have it at once. So long as precautions are taken to have the chill off, it will not hurt him in the least, but, rather, refresh him in his work and prepare him to enjoy his feed.

We might compare the horse to ourselves in this matter. The horse is man's noblest friend and should be treated as such. More than that, he should have special attention. We will take for an illustration the horse at harvest time, when the weather is very hot. He works all day in the hot sun and gets a drink of water only morning, noon and night, we work right along with him and get a drink of cool water a dozen times a day or more,

and feel refreshed from it, and feel more able for our work. All the horse gets for his work is the treatment we give him. The horse deserves the very best of treatment that man is able to give him. We can afford to make special efforts for his comfort. Be kind and thoughtful with him.

A variety of factors must unite in keeping horse flesh in good shape. Judgment in working and increasing or diminishing the allowance of heavy feed, regularity in time of feeding and working, also, as far as practicable, frequency of watering, and care in fitting harness—in a word, that rare quality called "common sense"—are the secrets in maintaining the teams in presentable shape and strong working condition. Some one has said: "It is not so much what you feed as how you feed it," common sense without oats being better than oats without sense.

UNWISE DRIVERS SPOIL HORSES

IT is to be feared that there are a good many people who, either by reason of their bad or careless driving, succeeded in spoiling a horse which came to them as free from vice or tricks as could be desired. A horse which by nature is not a shier can easily be transformed into something very like one by being unmercifully thrashed if he becomes startled at some unfamiliar sight. The next time he encounters anything of the kind he remembers his thrashing and associates the sight with suffering; then he shies again, and the punishment is repeated, with disastrous effects.

The man who is careless about his harness, and who allows his horse to drive himself, will spoil any animal and he is as likely to end up by getting the horse down as not; but this observation must not be taken as suggesting that a driver should always be fidgeting and worrying his horse. His aim should be to get the animal to go right and keep him at it; it is often the slovenly coachman who produces the ill-mannered horse.

In frequent cases it is the driver's fault when a horse stumbles, but even when it is not so it is quite unnecessary to use the whip in nine cases out of ten. If the horse once begins to connect a stumble with a thrashing he gets flurried when he puts a foot wrong, and is very likely to come down in consequence; but if he gets careless it is necessary to

wake him up by a light stroke, just to remind him that he must keep awake.

Of course the jagging at a horse's mouth is as certain a way to ruin the animal as anything from good practice to shout at and berate a horse for no particular fault.

A naturally timid animal is liable to lose its head on such occasions, while a bad tempered one resents it, for horses are not fools, and are far more amiable to kindness combined with firmness than they are to ill usage or violence of any kind. This being the case, it is unfortunate that their memories should be so good, for the recollection of chastisement has often transformed an ordinarily tempered horse into a perfect savage, and a good reliable worker into a useless brute.

If the nature of the horse were better understood he could be more easily trained and accidents would be of less frequent occurrence.

HIGH PRICES PAID FOR HORSES

IT is indeed remarkable the prices realized for a number of the more prominent members of the light harness horse industry and in order to give our readers some conception of the independent fortunes exchanged in this branch of the business.

Arion, 2:07¾	$125,000	Baden, 2:05¼	$30,000
Axtell, 2:12	105,000	Jay Gould, 2:21½	30,000
Director, 2:17	75,000	Cochato, 3, 2:11½	30,000
Dan Patch, 1:55¼	65,000	Lady Thorn, 2:18¼	30,000
Red Wilkes (†)	60,000	Blackwood, 2:21½	30,000
Anteeo, 2:16½	55,000	Prince Wilkes, 2:14¾	30,000
Bell Boy, 2:19¼ (*)	51,000	Ralph Wilkes, 2:06¾	30,000
McKinney, 2:11¼	50,000	Pancoast, 2:21¾	28,000
Stamboul, 2:07¼ (*)	50,000	The Hangman	28,000
Dare Devil, 2:09	50,000	Go. Sprague, 2:20½	27,500
Hamburg Belle, 2:01¼	50,000	Patron, 2:14¼	27,500
The Harvester, 2:01	50,000	Constantine, 2:12½	27,000
Robt. McGregor, 2:17½	50,000	Sidney, 2:19¾	27,000
Wilton, 2:19¼ (†)	50,000	The Abbott, 2:03¼	26,500
Allen Winter, 2:06½	50,000	Mascot, 2:04	26,000
Nancy Hanks, 2:04	45,000	Alcazar	25,800
Minor Heir, 1:59¼	45,000	Onward Silver, 2.05¼	25,000
Sunol, 2:08¼	41,000	Wig Wag	25,000
Bingen, 2:06¼ (*)	40,000	SterlingMcKinney,2:06¼	25,000
Major Delmar, 1:59¼	40,000	Cresceus, 2:02¼	25,000
Acolyte, 2:21	40,000	Voodoo	24,100
Billy Burke, 2:03¼	40,000	Nutwood, 2:18¾	22,000
Fearnaught, 2:23¼	40,000	Axworthy, 2:15½	21,000
Maud S., 2:08¾	40,000	Allie Wilkes, 2:15	20,000
Smuggler, 2:15¼	40,000	Bob Douglas, 2:04¼	20,000
Sultan	40,000	Judge Fullerton	20,000
Pocahontas	40,000	Prospero	20,000
Rarus, 2:13¼	36,000	Clingstone, 2:19¾	20,000
Antevolo, 2:19½	35,000	Harry Wilkes, 2:14¾	20,000
Uhlan, 2:02¼	35,000	Monte Carlo, 2:07¼	20,000
Siliko, 3, 2:11¼	35,000	Tommy Britton, 2:06½	20,000
Dexter, 2:17¼	33,000	St. Julien, 2:11¼	20,000
Goldsmith Maid, 2:14	32,000	Soprano	20,000
Todd, 2:14¾	32,000		

CONTROLLING SEX

MUCH has been written upon the subject of controlling sex. I have been interested in the different articles written upon this subject that have appeared in the Horse Journals from time to time. It is not remarkable. Yet it is plausible to believe that this can be accomplished. It might seem like taking that power in our own hands. Yet we are given wisdom that we might accomplish great things. In these days when we talk on wires, send messages through the air, and soar above the earth on wings, nothing would be impossible. I will not take this matter up expecting to show facts. What I have to say on this subject will not be from knowledge gained from experience, it will only be as theory. It is claimed that all things were made for a purpose. If this be true, then we should claim the right to say, this can be done. We know that there is the male and female in all families of the animal kingdom, and that nature has provided that all males have two testicles. We might style them as the male and female testicles. Why not? Would it not be natural to suppose that each was made for a separate purpose, one to produce a male germ, the other a female germ. If they were not for a separate purpose, why should there be any use for more than one. I would like to hear of some breeder testing this out. I think the quickest way to test it would be with the swine, remove one testicle, then breed and note results.

SALT

IF a horse is fed a small amount of salt every evening, there will seldom be a case of colic or any kind of disease. Regular salting keeps up good action of the kidneys, and that is what carries off the poison from the body, and then horses will seldom contract any kind of disease.

All of our domestic animals require more or less salt and they should have it, and where they could have free access to it every day in the year. In that way they will never take too much. It is cheaper than colic medicine or doctor bills. Breeding animals should have salt by all means, and then their breeding qualities will keep in a more normal condition.

Vigor Tablets, tonics or stimulants should never be given the stallion during the breeding season. They are the cause of sterility in many cases. There is no tonic or stimulant so good for a stallion in season or out of season as work in the harness and plenty of salt. This will increase the circulation of the blood, and increase all of the vital processes at the same time.

I trust that my talk on the horse may be of benefit to my brother breeders. If it is, then I shall have done a part of the duty each man owes his fellowman, and you and I shall feel all the better in return.

Sincerely yours,

O. CRITTENDEN.

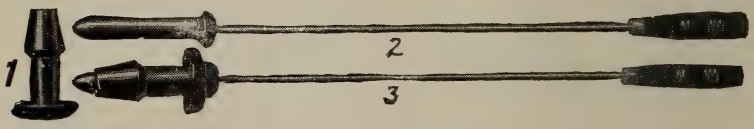
PART TWO

IN this part of the book I will add the space of a few pages to my business, "direct." That of which has already reached out into all parts of this country, and I trust that this addition may be of interest to you.

"One step won't take you very far,
You've got to keep on walking.
One word won't tell the folks all you know,
You've got to keep on talking.

One inch won't make you very tall,
You've got to keep on growing.
One little book won't reach them all,
You've got to keep 'em going."

THE O. C. SAFETY PREGNATOR



Invented by O. Crittenden

BY the help of artificial means Barren Mares and Cows can be made to be Prolific Breeders.

This Pregnator is intended to be used only on mares where their wombs are too closed. They are to hold the womb open and to assist nature.

You will notice that each part in this cut is numbered and for the benefit of those who may not be familiar with the O. C. Safety Pregnator and Dilator I will explain each part by number.

No. 1 is the O. C. Safety Pregnator.

No. 2 is the Dilator.

No. 3 is the O. C. Safety Pregnator and Dilator together, just as they are to be used in placing the Pregnator into the womb ready for the service of the stallion. The Dilator is not to be used in any other way. The point is what dilates, it simply opens the womb and guides the Pregnator into place.

My experience in the breeding business has been a school of its own, and the lessons learned through those years of careful study and practice in han-

dling stallions in the stud season, breeding mares in the breeding season, careful examining and making note of the conditions of all so-called barren mares at time of breeding, and my every-day observations in the breeding business, led me to invent the O. C. Safety Pregnator and Dilator, and Pregnator Extractor. My experience in using this instrument gave me knowledge of what could be

done with these mares that have been considered as barren and non-breeders.

By the use of the O. C. Safety Pregnator they have been made to be valuable brood mares, as above.

Nature intended that all breeding animals should be born with a normal condition of the breeding organs, and when nothing interferes with their development from birth, they should produce naturally. The trouble too often lies in the fact that those same organs have become weakened or impaired in some way.

After a mare has been bred to a stallion three or

four times during a single season and fails to get in foal, in a great many cases the owner of the mare condemns the stallion as a fault, and while sometimes this is true, it has been my experience that nine times out of ten the mares are at fault. A few such cases hurts the reputation of a stallion as a foal getter, and causes other mares to be bred to some other stallion. Any man that owns a stallion and has an O. C. Safety Pregnator will never be annoyed in that way. If you will just stop for one moment and consider the great value one would be to you, at their small cost, compared to the loss of several mares being bred to other stallions, you will readily see its economy. A wise man is always ready to do that which will promote his own best business interests.

Mr. K. S. Knutsen, Toronto, S. Dak., has been using my Pregnators for the past five years. In a letter received from him, he says, "I would no more think of starting in the breeding season without a Pregnator, than I would of going hunting without a gun."

Worth Remembering

Since I invented my first Pregnator in 1890, I have used them on hundreds of mares. I examined every doubtful case and made note of it at time of examination.

I have made this a study, and my experience has given me a knowledge which *no other man* has who is placing pregnators on the market to-day.

When a man orders a pregnator of any kind and has received it, and unless he has the proper direc-

tions he has received only about one-half of what he should have, in order to get the best results.

The value of ordering a pregnator from a man that has had long experience as a breeder and has invented pregnators through his own careful study, is that when you order a pregnator you can feel sure that you have *the man with the experience behind it.*

Then should you at any time have occasion and want a little information on some particular point along that line, you then have some one of experience to confer with free of charge.

There are other Pregnators on the market to-day, some of which are offered by men that never led a stallion out of their stalls nor bred a mare in their lives, yet they send out directions for their use based upon theory alone.

Theory is a grand thing in its way; experience, however, is far better.

I deal herein with facts, and with facts only. Theory is not enough. Nothing is proved by it. In effect it is no better than a guess.

We believe that human nature or instinct would lead almost any one to prefer a Pregnator invented by a man with a breeding experience to those sent out by persons who are uneducated in the science of breeding, or the requirements and use of Pregnators.

Holds it Open

When a mare's womb is closed hard and rigid, there is no chance for such mare to be gotten in foal without the assistance of a Pregnator. By placing the O. C. Safety Pregnator into the

mouth of the womb, it holds it open and at the same time provides a passage way through the pregnator and womb, where the stallions injects the semen directly into the womb, or breeding sack. There it comes in contact with the egg of the female, causing her at once to become pregnant. Nature has provided that the womb should relax during the period she is in heat, but in a great many cases it does not relax; therefore, the semen cannot enter the womb and the mare thus fails to become in foal, and the mare is then considered as barren. My experience has taught me that not one in fifty that are called barren really are barren.

When a womb is too closed, hard and rigid, it becomes shrunken and dormant, and does not open at time of service, as nature has provided. When the O. C. Safety Pregnator has been placed in the womb it holds it open to its natural size, and then at time of service the coupling is made natural and according to nature.

And by using the O. C. Safety Pregnator on such mares they will produce colts the same as any mare.

Now let us stop and think a little, let us exercise a little reason and common sense. Suppose we have a mare where her womb is so closed that the semen from the stallion cannot enter at time of service.

Then we will use the O. C. Safety Pregnator on her, insert it into the womb and leave it remain until after the service so as to hold it open. Now, if the stallion injects the semen through

the Pregnator into the womb and breeding sack where it comes in contact with the egg of the female, then what under the shining sun is there to prevent that mare from getting in foal, there is every reason to believe she will.

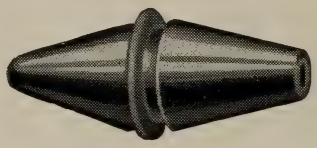
I do not claim that all of the so-called barren mares can be gotten in foal from the use of a Pregnator. We have found mares where they were deformed in some parts of the breeding organs. We have also found mares with lacerations about the womb that had been caused at the time of last foaling. With such mares a Pregnator would be of no use. When a mare's womb is closed hard and rigid such mares can positively be gotten in foal from the use of a Pregnator as artificial assistance.

The hardest proposition to overcome in breeding is the large open womb, and the only way to restore such to a normal condition is to treat the mare for the cause, and that must be done through the stomach, by treating her with the O. C. Abortion Remedy. This is given in the feed. It works on the womb, restores it to a normal condition, and gives it strength to close and seal itself after the mare has been bred. If this class of mares are not looked after and treated for this weakness, they will not produce as the womb will not have strength enough to retain the seminal fluid and it will pass off within a short time after the mare has been bred.

Price of O. C. Safety Pregnator and Dilator $5.00; 25 cents more if ordered sent by Parcel Post, otherwise it will be sent by Express.

THE O. C. PREGNATOR EXTRACTOR

To Be Used With the O. C. Safety Pregnator



THIS Extractor is something that has been of a long felt want to those who have used the O. C. Safety Pregnator, something that may be used to remove the Pregnator from the mare's womb without inserting the hand into the vulva after the mare has been bred.

The instrument works so perfectly that it makes the O. C. Safety Pregnator even more valuable to breeders.

To use this Extractor it is to be screwed onto the end of the Dilator Rod, inserted into the vulva and on in until it enters the Pregnator that was left remaining in the womb until after the service. By inserting the Extractor part way into the Pregnator and then lightly drawing back on the rod causes the Extractor to grip hold on the inside of the Pregnator and brings it out of the womb and on out of the vulva.

The Extractor is simply to save you from inserting your hand into the vulva for the Pregnator after the mare has been bred. If you have an O. C. Safety Pregnator and have tried the

Extractor once you would not want to be without one, as they work so nicely and the cost is only a trifle.

It is remarkable to see how easily and nicely it grips hold on the inside of the Pregnator, extracts it from the womb and brings it out of the vulva.

They are made of two kinds of material. One is made of hard rubber and the other of aluminum. They are exactly alike in shape and size, and are provided with a soft rubber grip. In ordering state the kind you want. This Extractor will work the same in any Safety Pregnator, no matter if the Pregnators are sold this year or those sold years before.

This Extractor cannot be used with the O. C. Improved Reliable Pregnator.

Full directions sent with each Extractor.

Price of O. C. Pregnator Extractor, $1.00.

THE O. C. IMPROVED RELIABLE PREGNATOR

For Barren Mares and Cows

Patented Nov. 7, 1911, by O. Crittenden

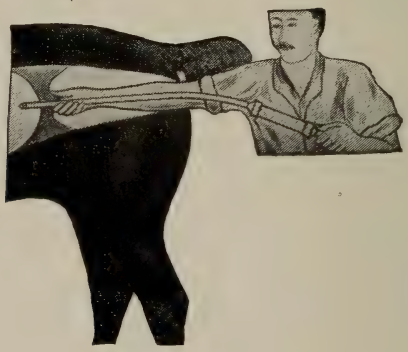
ARTIFICIAL Impregnation has come to be a practical thing. Many of the leading breeders and stallion owners in this country now use artificial means in breeding. To keep in pace in breeding, we must keep up with the progress of the times. By the use of the O. C. Improved Reliable Pregnator as artificial assistance the semen is taken from one mare after she has been bred and deposited in the wombs of a dozen or more mares and they will become in foal if the semen is properly distributed from the Pregnator into the wombs of that many or more. Breeders and stallion owners are using our Pregnators with the most positive success. When you use a Pregnator as artificial assistance in breeding you save your stallion from being hard run in the stud, and you can breed more mares and get a larger per cent of foals and colts of stronger constitution. You then make your stallion business more profitable and mares will not have to be returned for a second or third service.

By having the horse billed for a certain hour each day, the mares can all be on hand at the hour stated, and in a few minutes several mares can be bred with a single service of the horse. If but two mares are to be bred, the Pregnator may be used to transfer the semen from one mare to the other. In this way one service a day will suffice for serving any number of mares, and the stallion that is used in excess of this cannot be expected to render a very good account of himself.

Very often a stallion is made barren caused by overwork in the stud. If your neighbor who owns a stallion uses a Pregnator as artificial assistance in breeding, and you continue in the old-time hit-or-miss method without artificial assistance, your neighbor will be chuckling behind your back to see you breeding mares two or three times each during the season. While he will be getting nearly every mare in foal the first time they are bred to his stallion, and your neighbor's stallion will go through the season full of vim and vigor and with a large per cent. of foals, while your stallion will go through the season hard run, low in vitality and with a smaller per cent of foals and colts of a weaker constitution. This should be well worth your consideration. There are hundreds of germs in one service of a stallion; one fertile germ is enough to impregnate a mare, and by keeping the semen at the same temperature it can be taken if desired hundreds of miles and then injected into the womb of another mare, and if she is in the proper condition she will become safe in foal.

For a Pregnator to transfer the semen from one mare to the womb of another mare, there never was a Pregnator made that can equal the O. C. Improved Reliable Pregnator. It has valuable and necessary improvements that no other Pregnator ever had.

These Pregnators are made somewhat like a syringe. At the pointed end is a dilator than can be removed for cleaning after use. The dilator tapers to a point, perfectly smooth, so it will not irritate the tender parts while being inserted into the womb. The pointed end is to open the womb



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The O. C. Improved Reliable Pregnator in Operation

and guide the pregnator into place. The dilator has no hole at the small end, as that might be injurious to the womb while being inserted. These Pregnators have six holes in the sides of the dilator, while other makes have only one hole, and that is at the small pointed end. The reliable having six

holes gives it six times the capacity for gathering the semen into the pregnator over and above any other make now in use. After the pregnator has been inserted into the vulva, the semen is many times more apt to lie at the sides of the pregnator than at the end. Therefore, these Pregnators can draw the semen from all sides, while others can only draw from the point. With the capacity that they have for gathering the semen makes it of more value to breeders than any Syringe Pregnator made.

BREEDING BAGS

THE Breeding Bag if properly handled is a convenient thing to use, but there are things in connection with its use that should be considered.

A breeding Bag is all right if used all right, and if not you will soon have a cross stallion and then there will be trouble.

The O. C. Improved Reliable Pregnator can be inserted into the vagina and take the semen from there without the use of a breeding bag.

The O. C. Improved Reliable Pregnator can be used on cows with just as good results as on mares.

Do Not Send Your Cow to the Butcher

thinking that she is barren, but give these Pregnators a trial, and you will feel that you have been paid a hundred-fold when she drops a fine, well-developed calf in due time. I kindly ask all breeders to give this matter their most careful consideration, and should you order an instrument from me you may have the benefit of my experience for the asking. I am ready to give you all the information you desire in regard to the use of the Pregnator, and about the breeding organs of the so-called barren mares and cows.

Price of O. C. Improved Reliable Pregnator $5.00. Send 25 cents more for postage if ordered sent by Parcel Post, otherwise it will be sent by express.

THE O. C. HUMAN PREGNATOR

For Barren Women

Patented Nov. 7, 1911, by O. Crittenden

TO assist nature in the human family that all so-called barren women may help to multiply and replenish the earth with the sons and daughters of every succeeding generation, that each may share in that great blessing given in the laws of nature "A Mother." Mankind ever lifts the hat and bends the knee to the mother and her new-born babe more than to kings and queens.

Our instrument is to assist nature by opening the womb and inducting the semen to the natural point of conception where it comes in contact with the egg of the female causing her to become pregnant. No woman that is considered "barren" can become a mother without using the O. C. Human Pregnator as artificial assistance.

We find a great many married couples have thus far during their married life been unfortunate and disappointed and have longed for something to assist them that they might become the parents of a lawful heir. Neither the husband or wife that never experienced nature's greatest charm (a new-born babe) can realize that happiness as does the

father and mother with a new-born babe under their watchful eye. We have now placed within the reach of all such assistance as the O. C. Human Pregnator, an instrument that can be relied upon, and I earnestly recommend that you submit this to your family physician for his opinion.

This instrument is made of special material, fine hard rubber and full nickel silvered brass, being entirely antiseptic and each one carefully inspected. They can be easily used and will be sent with full directions in plain unmarked package upon receipt of price, $8.00.

ABORTION IN MARES AND COWS

A Life Preserver

AMONG the many articles and books written on the subject of Abortion, now so prevalent among both mares and cows, we find there is a vast difference of opinion as to the causes of abortion. During my many years of experience as a breeder, sparing no pains to so study this most annoying and unprofitable trouble, has been the means of opening the gates to success.

Nearly every breeder all over the land has experienced a financial loss of more or less from the

effects of abortion. Breeders who have had this to contend with know full well what it means.. It means that if mares and cows cannot be kept from aborting, they must be sold (at a loss), as a breeder, and others put in their places.

Oftentimes a mare will abort and be classed as

barren, for the very reason that the owner of such mare is not aware of her aborting. The womb being in a weak condition at time of service she aborts within a few days undetected by the owner.

Conditions of Mares

There is one very distressing condition that arises to both the owner of the mare and the owner of the stallion in the matter of aborting mares, they fail to realize that so many cases of abortion occur within only a few days after service.

Abortion prevails in all parts of this country,

Cut No. 3 Shows a Large Open Womb

No. 3

and in some breeding districts it has made horse breeding very unprofitable. If breeders and stallion owners would educate themselves in this matter of abortion they would overcome a wonderful per cent of this trouble.

Class No. 1. A great many mares and cows carry their offspring for months and then abort

through some unknown cause, very often on account of weakness of the womb.

When a mare or cow has aborted once she is pretty apt to abort again and at about the same period of pregnation, possibly through sympathy from the same affliction of the year before. This can be remedied by beginning to treat her with the O. C. Abortion Remedy, about one month before that period that she had aborted other years, and by carrying her over that period she will then carry the foal the full time.

To expend a few dollars for a remedy that can be relied upon is much better and cheaper than to discard a valuable mare or cow far below her real value as a breeder.

It is claimed the loss in Nebraska alone, resulting from mares that do not produce, amounts to $25,000,000 every year, and in all of the United States the loss from this source will reach $250,000,000 every year. An average of less than 23 foals produced by every stallion owned in this country.

Class No. 2. During my long experience with barren mares I have found about 60 per cent. of them to be mares with large open wombs at time of service. These mares get in foal very readily when bred, but their wombs being in a weak condition they have not strength and vitality enough to close and retain the service, consequently they abort within a few days after being bred and as a matter of course the owner not being wise as to what has happened naturally keeps on breeding her time after time and finally calls her barren. There are many thousands of mares

of this class being bred every year, and of course they fail to produce, thus causing a great financial loss among breeders. It is all wrong to cast these mares off as barren, when they would produce if they were treated for the cause; of course if you never try to do anything you will never accomplish anything. If you would buy a grain farm and did not till the soil, you could not expect any financial profits. If you will examine a few mares that are considered barren you will find their wombs to be either too closed or too open, which is a proof for their barrenness. I have had mares of my own where their wombs were so open that I could easily insert nearly the whole hand. These same mares I treated at that time with the O. C. Abortion Remedy and they produced colts from that service the same as any mare. Some amateur breeders might ask how they are to know if the womb is in a weak condition or otherwise. For the benefit of such breeders I will describe the difference in which they may be found.

Points of Interest

When a mare's womb is in a normal condition you can just cleverly insert one finger. Such mares should be bred in the ordinary way and without any artificial assistance.

When a mare's womb is too closed it is hard and rigid and you can scarcely insert one finger and sometimes not that. Such mares will not get in foal unless you use a Pregnator as artificial assistance.

When a mare's womb is too open it is in a weak

condition, open and flabby, and you can insert from two to four fingers or more. Such a womb has no vitality nor strength to close and retain the service. To put life and vitality into this class of wombs medicine must be administered to the mare internally just as you would take medicine internally for the liver or kidneys, etc. The O. C. Abortion Remedy is given in the feed; it works on the womb, giving it strength and vitality. With this class of mares the treatment should begin as soon as they are bred, or even better if a week before, if the womb is too open you can rest assured that such mares will not carry the service many days unless you proceed at once to treat her with the O. C. Abortion Remedy. Exercise a little judgment, and, if you will do your part as a breeder, she will do her part; give her a chance, treat her for her misfortune and she will soon prove to you that she is a valuable brood mare, therefore do not be in a hurry to discard a mare because she does not breed.

Price $2.00 per bottle. 25 cents extra if ordered sent by Parcel Post, otherwise it will be sent by express.

THE O. C. DOUBLE ACTION STALLION CONTROLLER

THE above cut shows a large and vicious draft stallion under perfect control with the O. C. Stallion Controller.

In my own experience of many years handling stallions, and particularly those of the more vicious nature I have realized how dangerous it often becomes. Too many times the keeper's life is in the gravest danger. Sometimes while in service a

stallion becomes vicious and very wicked, while he may be very docile and gentle generally. Many a time after I had secured a vicious horse in his stall, I would realize how nearly I had come to serious accident or even death. Quite naturally I tried nearly every Controller that I could find on the market, and yet none of them seemed to fill the bill. Then I naturally turned to the task of experimenting for myself. The result was, I soon devised my present Controller, which I at once named "The O. C. Double Action Stallion Controller." It proved so successful and so completely perfect and having so many calls for them from my immediate friends that I decided to place them on sale. It is so constructed that it adjusts itself to the behavior of the horse. The bit is a joint bit with the mouth pieces made flat so it will not cut the mouth.

There is a strap fastened to one ring of the bit, and goes over the nose and hooks into the opposite ring. Also double action twisted chain so constructed between the two rings in the bit, that when the stallion pulls on the lead strap it brings all forces into action. It grips hold of his under jaw, tightens the strap over the nose so he cannot squeal enough to arouse the whole neighborhood. It forces the joint of the bit into the roof of his mouth. When all these forces comes into action it is more than he is able to endure, he is then completely subdued.

Under Perfect Control

With the O. C. Controller you have absolute control over any stallion at all times; with it you have

just as much control over a stallion as a man has over a bull with a ring in his nose. The peculiar action of the Controller forces him to yield to it at once and makes him recognize you as his master. No matter how gentle your stallion may be generally, you often find him naturally quite determined in breeding season, and when you are least expecting it, he will often cause you the most trouble. Every stallion keeper owes a duty to his own safety in behalf of his family as well as himself to provide every precaution against possible danger.

When a stallion decides to have his own way, it is almost impossible to control him with any other method I have ever seen. The O. C. Controller at once comes to the rescue, and he is made to know at once that YOU ARE MASTER.

The cost of the O. C. Stallion Controller is very small, as the price has been put low, that it may compare favorably with prices on all goods listed in this catalogue, and at this low price, every stallion owner should feel it his duty to have a Controller for his own protection and welfare of his family.

Price $2.25. If ordered sent by Parcel Post 25 cents more, otherwise it will be sent by express.

For want of space, I will only make mention here of the remainder of goods we have on sale.

The O. C. Heave Remedy, per box $2.00
The O. C. Good Samaritan Remedy, per bottle 1.50

The O. C. Worm Remedy, per box 50
The O. C. Pile Ointment, which is great, per box 50
The O. C. Gall Healer, per box 50
The O. C. Stallion Conditioner, per box ... 2.00

ORLANDO CRITTENDEN,
Ashland, O.

Table Showing Time of Gestation from Any Date of Service

The following table shows the time a mare is due to foal after any date of service. You will find this table to be very convenient.

Date of Breeding	Date of Foaling	Date of Breeding	Date of Foaling	Date of Breeding	Date of Foaling
Jan. 1	Dec. 6	May 1	Apr. 5	Sep. 1	Aug. 6
" 4	9	" 4	8	" 4	9
" 7	12	" 7	11	" 7	12
" 10	15	" 10	14	" 10	15
" 13	18	" 13	17	" 13	18
" 16	21	" 16	20	" 16	21
" 19	24	" 19	23	" 19	24
" 22	27	" 22	27	" 22	27
" 25	30	" 25	31	" 25	30
" 28	Jan. 2	" 28	May 2	" 28	Sep. 2
" 31	5	" 31	5	Oct. 1	5
Feb. 3	8	Jun. 3	8	" 4	8
" 6	11	" 6	11	" 7	11
" 9	14	" 9	14	" 10	14
" 12	17	" 12	17	" 13	17
" 15	20	" 15	20	" 16	20
" 18	23	" 18	23	" 19	23
" 21	26	" 21	26	" 22	26
" 24	29	" 24	29	" 25	29
" 27	Feb. 1	" 27	Jun. 1	" 28	Oct. 2
Mar. 2	4	" 30	4	" 31	5
" 5	7	Jul. 3	7	Nov. 3	8
" 8	10	" 6	10	" 6	11
" 11	13	" 9	13	" 9	14
" 14	16	" 12	16	" 12	17
" 17	19	" 15	19	" 15	20
" 20	22	" 18	22	" 18	23
" 23	25	" 21	25	" 21	26
" 26	28	" 24	28	" 24	29
" 29	Mar. 3	" 27	Jul. 1	" 27	Nov. 1
Apr. 1	6	" 30	4	" 30	4
" 4	9	Aug. 2	7	Dec. 3	7
" 7	12	" 5	10	" 6	10
" 10	15	" 8	13	" 9	13
" 13	18	" 11	16	" 12	16
" 16	21	14	19	" 15	19
" 19	24	17	22	" 18	22
" 22	27	20	25	" 21	25
" 25	30	23	28	" 24	28
" 28	Apr. 2	" 26	31	" 27	Dec. 1
		" 29	Aug. 3	" 30	4

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